

<213> Homo sapiens

<400> 1950

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Met Leu His Glu Arg Leu Ala Pro Leu Leu Lys Arg His Leu Pro Leu
 1           5           10           15
Ala Asp Val Ala Arg Arg Thr Gly Arg His Val Ile Arg Leu Asp Val
          20           25           30
Thr Leu Arg Met Pro Arg Arg Asp Ala His Lys Leu Pro Leu Ala Ile
 35           40           45
Arg Gly Ser Leu Gly Leu Asp Arg Ala Tyr Asn Arg Val Tyr Met Val
 50           55           60
Ala Met Pro Pro Ile Gly Gln Trp His Ser Thr Val Arg Ala Ala Ala
 65           70           75           80
Val Val Phe Ala Pro Glu Pro Ile Ala Leu Cys Phe Arg Gln Pro Ala
          85           90           95
His Ala Leu Cys Ser Thr Ala Gly Val Ala Ala Ser Trp Gln Ala Thr
          100          105          110
Pro Arg Ser Ala Pro Ala Ser Ser Leu Thr Ala Pro Gly
          115          120          125

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<210> 1951

<211> 363

<212> DNA

<213> Homo sapiens

<400> 1951

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cggcgccgcg cctccgcgtc ccggggccccc gccgccaccg cgccccccgc gggagatgga
60
acagcggaac cggtcgggtg cctcgggata cctgccgcct ctgctgctgc atgccctgct
120
gctcttcgtg gccgacgtg cattcacaga agtccccaaa gatgtgacag tacggggagg
180
agacgacatc gaaatgccct gcgcgttccg ggccagcgga gccacctcgt attcgttgga
240
gattcagtgg tggtaacctca aggagccacc ccgggagctg ctgcacgagc tggcgctcag
300
cgtgccgggc gcccgagca aggtaacaaa taaggatgca actaaaatca gcaccgtacg
360
cgt
363

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<210> 1952

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1952

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Arg Pro Pro Pro Leu Arg Ser Arg Ala Pro Ala Ala Thr Ala Pro Pro
 1           5           10           15
Ala Gly Asp Gly Thr Ala Glu Pro Ala Arg Cys Pro Arg Ile Pro Ala
          20           25           30
Ala Ser Ala Ala Ala Cys Pro Ala Ala Leu Arg Gly Arg Arg Cys Ile
          35           40           45
His Arg Ser Pro Gln Arg Cys Asp Ser Thr Gly Gly Arg Arg His Arg

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      50              55              60
Asn Ala Leu Arg Val Pro Gly Gln Arg Ser His Leu Val Phe Ala Gly
65              70              75              80
Asp Ser Val Val Val Pro Gln Gly Ala Thr Pro Gly Ala Ala Ala Arg
      85              90              95
Ala Gly Ala Gln Arg Ala Gly Arg Pro Glu Gln Gly Asn Lys
      100              105              110

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<210> 1953  
 <211> 329  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1953
acgcgtcagc ctgagcccaa taactataaa agagtcgcaa ccatgactgt gctattgagt
60
gagcgcagcc agattttccg ggggtgccgat gcctacgcgg tgcgggacta cgtcaaccag
120
catgtgggca gccactgcat tcgcctgcct cccaagggcc ggccacgggc gagtatcagc
180
catcgcacct ttgccagcct ggacctgtgc cgcacagct acggcgctcc ggtacgggtc
240
acatcggtgg cgctggagac catctatcac ctgcagatcc tgttgagcgg gcattgccgc
300
tccagctccc gtggtgagga tgacgtggn
329

```

<210> 1954  
 <211> 109  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1954
Thr Arg Gln Pro Glu Pro Asn Asn Tyr Lys Arg Val Ala Thr Met Thr
1              5              10              15
Val Leu Leu Ser Glu Arg Ser Gln Ile Phe Arg Gly Ala Asp Ala Tyr
      20              25              30
Ala Val Ser Asp Tyr Val Asn Gln His Val Gly Ser His Cys Ile Arg
      35              40              45
Leu Pro Pro Lys Gly Arg Pro Arg Ala Ser Ile Ser His Arg Thr Phe
      50              55              60
Ala Ser Leu Asp Leu Cys Arg Ile Ser Tyr Gly Ala Pro Val Arg Val
65              70              75              80
Thr Ser Val Ala Leu Glu Thr Ile Tyr His Leu Gln Ile Leu Leu Ser
      85              90              95
Gly His Cys Arg Ser Ser Ser Arg Gly Glu Asp Asp Val
      100              105

```

<210> 1955  
 <211> 415  
 <212> DNA  
 <213> Homo sapiens

<400> 1955

acgcgtggct cgacgaaaac caagtacgag acatgcccgga caaggacta tcacacatgg  
 60  
 tggaatactg ctggggggcgc ttcacagaca acatcaaata cgctgtagct gcccaatatt  
 120  
 ggaaagggcc acacaagccc gatagtgacc atcaacggat cattgtaggc tatttcaaaa  
 180  
 ccgccaaca agccatgaac gcagcaaaac aattccactg gaacacccgg ctacaacaac  
 240  
 aatggaaaac atggatactc ccagtccaca acggcaccgt gtccgagttt ttcacccaac  
 300  
 aaaaaacttt gctagacgag caagacgata gcaatagcga gctgccggag catctacaaa  
 360  
 acgtcatgtg cggcaaaaaca ctccaccacc aagacgacac catatcgtgg tgcac  
 415

<210> 1956  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

<400> 1956  
 Met Pro Asp Lys Val Leu Ser His Met Val Glu Tyr Cys Trp Gly Arg  
 1 5 10 15  
 Phe Thr Asp Asn Ile Lys Tyr Ala Val Ala Ala Gln Tyr Trp Lys Gly  
 20 25 30  
 Pro His Lys Pro Asp Ser Asp His Gln Arg Ile Ile Val Gly Tyr Phe  
 35 40 45  
 Lys Thr Ala Lys Gln Ala Met Asn Ala Ala Lys Gln Phe His Trp Asn  
 50 55 60  
 Thr Arg Leu Gln Gln Gln Trp Lys Thr Trp Ile Leu Pro Val His Asn  
 65 70 75 80  
 Gly Thr Val Ser Glu Phe Phe Thr Gln Gln Lys Thr Leu Leu Asp Glu  
 85 90 95  
 Gln Asp Asp Ser Asn Ser Glu Leu Pro Glu His Leu Gln Asn Val Met  
 100 105 110  
 Cys Gly Lys Thr Leu His His Gln Asp Asp Thr Ile Ser Trp Cys  
 115 120 125

<210> 1957  
 <211> 526  
 <212> DNA  
 <213> Homo sapiens

<400> 1957  
 acgcgttccg gagagatttt cctaacctct ctccgagctg ctgagccgat cggtgaccac  
 60  
 caggagctcc tccctgtgag gacaaagttc cagagtcggg gtcacggggc ttacttattg  
 120  
 gggaggaggc ccgccccggc cgcagtgggc gaggggccct tggcgcgctc ctgggaggtc  
 180  
 agacctggca cagtgtggcg aaggtttcca gtgcgatccc gagtcgaggg cgcatttcgc  
 240  
 ggtgactgcc agcatgaacc gcagccgacc gagttctgcg atcgggcttc tccgcagagt  
 300

ggggaccctg gggaaggcgc caacttctct cctctgccca cctcactccc cgcgggcgtc  
360  
cctggggcgc ctgcccgggc cgcactgggc ggcctccatc gtcccttccc tctacctgca  
420  
ctgccccagg cgggagagag gccttgcccc nncgaggac cagctgcagc gggcagcggg  
480  
gtcctgtctc cccaaccccc gccccatggc acggggctga accggt  
526

&lt;210&gt; 1958

&lt;211&gt; 175

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1958

Thr	Arg	Ser	Gly	Glu	Ile	Phe	Leu	Thr	Ser	Leu	Arg	Ala	Ala	Glu	Pro
1			5					10						15	
Ile	Gly	Asp	His	Gln	Glu	Leu	Leu	Pro	Val	Arg	Thr	Lys	Phe	Gln	Ser
			20					25					30		
Arg	Gly	His	Gly	Pro	Tyr	Leu	Leu	Gly	Arg	Arg	Pro	Ala	Gly	Ala	Ala
			35				40					45			
Val	Gly	Glu	Gly	Pro	Leu	Ala	Arg	Ser	Trp	Glu	Val	Arg	Pro	Gly	Thr
			50			55				60					
Val	Trp	Arg	Arg	Phe	Pro	Val	Arg	Ser	Arg	Val	Glu	Gly	Ala	Phe	Arg
65					70				75					80	
Gly	Asp	Cys	Gln	His	Glu	Pro	Gln	Pro	Thr	Glu	Phe	Cys	Asp	Arg	Ala
			85					90					95		
Ser	Pro	Gln	Ser	Gly	Asp	Pro	Gly	Glu	Gly	Ala	Asn	Phe	Ser	Pro	Leu
			100				105					110			
Pro	Thr	Ser	Leu	Pro	Ala	Gly	Val	Pro	Gly	Pro	Pro	Ala	Arg	Ala	Ala
			115				120					125			
Leu	Gly	Gly	Leu	His	Arg	Pro	Phe	Pro	Leu	Pro	Ala	Leu	Pro	Gln	Ala
			130				135				140				
Gly	Glu	Arg	Pro	Trp	Pro	Xaa	Glu	Gly	Pro	Ala	Ala	Ala	Gly	Ser	Gly
145					150				155					160	
Val	Leu	Leu	Pro	Gln	Pro	Pro	Pro	His	Gly	Thr	Gly	Leu	Asn	Arg	
			165					170					175		

&lt;210&gt; 1959

&lt;211&gt; 378

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1959

gtgcaccgga cggtcctccc aacggatcat ggcacggccc agcggaaggc tcaccgagt  
60  
cgtcagaagg atcagggcgc ttgtcgtcgt cagacttcag gacatccac gacatgggta  
120  
acggctggga ggagaccttg tccccgtcgg tcttggcgcc gacaacaaca ccgctcatgg  
180  
tgtattttcc ggcattgagt aagaaccagt gggcatgctg atgacccttg atcggcagt  
240  
aggctccttt gaccaccta tatgtgtcat cagcgaggaa ggtgccgagt ttggcggtct  
300



cgtctgcctc ggggtgaattg ccgaggaggt acatcttgcc tggacccgta atcgcggtga  
 360  
 agtcgacgcg caacgcgt  
 378

<210> 1960  
 <211> 111  
 <212> PRT  
 <213> Homo sapiens

<400> 1960  
 Met Tyr Leu Leu Gly Asn Ser Pro Glu Ala Asp Glu Asn Ala Lys Leu  
 1 5 10 15  
 Gly Thr Phe Leu Ala Asp Asp Thr Tyr Gln Val Val Lys Gly Ala Ser  
 20 25 30  
 Leu Pro Ile Lys Gly His Gln His Ala His Trp Phe Phe Thr His Ala  
 35 40 45  
 Gly Lys Tyr Thr Met Ser Gly Val Val Val Gly Ala Lys Thr Asp Gly  
 50 55 60  
 Asp Lys Val Ser Ser Gln Pro Phe Thr Met Ser Trp Asp Val Leu Lys  
 65 70 75 80  
 Ser Asp Asp Asp Lys Arg Pro Asp Pro Ser Asp Asp Ser Gly Glu Pro  
 85 90 95  
 Ser Ala Gly Pro Ser His Asp Pro Leu Glu Glu Pro Ser Gly Ala  
 100 105 110

<210> 1961  
 <211> 384  
 <212> DNA  
 <213> Homo sapiens

<400> 1961  
 ggatccaccc cggaaccgg caggatgaag ggggcaagtg aggagaagct ggcattctgtg  
 60  
 tccaacctgg tctactgtgtt tgagaatagc aggacccag aagcagcacc cagaggccag  
 120  
 aggctagagg acgtgcatca ccgccctgag tgcaggcctc ccgagtcctc aggaccacgg  
 180  
 gagaagacga atgtcggggg ggccgtgggg tctgagccca ggacagtcag caggaggtac  
 240  
 ctgaactccc tgaagaacaa gctgtccagc gaagcctgga ggaaatcttg ccagcctgtg  
 300  
 accctctcag gatcggggac gcaggagcca gagaagaaga tcgtccagga gctgctggag  
 360  
 acagagcagg cctatgtggc gcgc  
 384

<210> 1962  
 <211> 128  
 <212> PRT  
 <213> Homo sapiens

<400> 1962  
 Gly Ser Thr Pro Glu Thr Gly Arg Met Lys Gly Ala Ser Glu Glu Lys

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      1             5             10             15
Leu Ala Ser Val Ser Asn Leu Val Thr Val Phe Glu Asn Ser Arg Thr
      20             25             30
Pro Glu Ala Ala Pro Arg Gly Gln Arg Leu Glu Asp Val His His Arg
      35             40             45
Pro Glu Cys Arg Pro Pro Glu Ser Pro Gly Pro Arg Glu Lys Thr Asn
      50             55             60
Val Gly Glu Ala Val Gly Ser Glu Pro Arg Thr Val Ser Arg Arg Tyr
      65             70             75             80
Leu Asn Ser Leu Lys Asn Lys Leu Ser Ser Glu Ala Trp Arg Lys Ser
      85             90             95
Cys Gln Pro Val Thr Leu Ser Gly Ser Gly Thr Gln Glu Pro Glu Lys
      100            105            110
Lys Ile Val Gln Glu Leu Leu Glu Thr Glu Gln Ala Tyr Val Ala Arg
      115            120            125

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&lt;210&gt; 1963

&lt;211&gt; 323

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1963

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nnncccttcc taccctccca tactcccccac cctctttcct cccctgtgac tgagcttgca
60
ggcatgaaac acccacctgg cctctctccc tctgttttgc ccttctgtc gtctctctcc
120
cacagctgcc tggctcttcg gcgtcagtc accaccttct gcagctctcc ctcaccctgg
180
cgaccactca ggcattgcac tcgcggggccc ccttcagacc tctcggggtc atcttccctt
240
tccctggcca ttatttttct tcattctgggc tgggcccggg ggggcgttcc ccccttctct
300
cttcttttct tttttttctc ttt
323

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&lt;210&gt; 1964

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1964

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Xaa Pro Phe Leu Pro Ser His Thr Pro His Pro Ser Ser Ser Pro Cys
      1             5             10             15
Ala Glu Leu Ala Gly Met Lys His Pro Pro Gly Leu Ser Pro Ser Val
      20             25             30
Leu Pro Leu Leu Ser Ser Leu Ser His Ser Cys Leu Ala Leu Arg Arg
      35             40             45
Gln Ser Thr Thr Phe Cys Ser Ser Pro Ser Pro Trp Arg Pro Leu Arg
      50             55             60
His Ala Ser Arg Gly Pro Pro Ser Asp Leu Ser Gly Ser Ser Ser Pro
      65             70             75             80
Ser Leu Ala Ile Ile Phe Leu His Leu Gly Trp Ala Arg Arg Gly Val
      85             90             95
Pro Pro Leu Pro Leu Leu Ser Phe Phe Phe Ser

```

100

105

<210> 1965  
<211> 1416  
<212> DNA  
<213> Homo sapiens

<400> 1965  
cggctggggc aggagctgga cgacgccacc atggacctgg agcagcagcg gcagcttggtg  
60  
agcaccctgg agaagaagca gcgcaagttt gaccagcttc tggcagagga gaaggcagct  
120  
gtacttcggg cagtggagga acgtgagcgg gccgaggcag agggccggga gcgtgaggct  
180  
cgggccctgt cactgacacg ggcactggag gaggagcagg aggcacgtga ggagctggag  
240  
cggcagaacc gggccctgcg ggctgagctg gaggcactgc tgagcagcaa ggatgacgtc  
300  
ggcaagagcg tgcattgagct ggaacgagcc tgccgggtag cagaacaggc agccaatgat  
360  
ctgcgagcac aggtgacaga actggaggat gagctgacag cggccgagga tgccaagctg  
420  
cgtctggagg tgactgtgca ggctctcaag actcagcatg agcgtgacct gcagggccgt  
480  
gatgaggctg gtgaagagag gcggaggcag ctggccaagc agctgagaga tgagagggtg  
540  
gagcgggatg aggagcggaa gcagcgcaact ctggccgtgg ctgcccga gaagctggag  
600  
ggagagctgg aggagctgaa ggctcagatg gcctctgccg gccagggcaa ggaggaggcg  
660  
gtgaagcagc ttcgcaagat gcaggcccag atgaaggagc tatggcggga ggtggaggag  
720  
acacgcacct cccgggagga gatcttctcc cagaatcggg aaagtga aaa gcgcctcaag  
780  
ggcctggagg ctgagggtgct gcggctgcag gaggaactgg ccgcctcgga ccgtgctcgg  
840  
cggcaggccc agcaggaccg ggatgagatg gcagatgagg tggccaatgg taaccttagc  
900  
aaggcagcca ttctggagga gaagcgtcag ctggaggggc gcctggggca gttggaggaa  
960  
gagctggagg aggagcagac anactcagag ctgctcaatg accgctaccg caagctgctc  
1020  
ctgcaggtag agtcaactgac cacagagctg tcagctgagc gcagtttctc agccaaggca  
1080  
gagagcgggc ggcagcagct ggaacggcag atccaggagc tacggggacg cctgggtgag  
1140  
gaggatgctg gggcccgtgc ccgccacaag atgaccattg ctgcccttga gtctaagttg  
1200  
gcccaggctg aggagcagct agagcaagag accagagagc gcatcctctc tggaaagctg  
1260  
gtgcccaaaa gtaagaagcg gtttaagag gtggtgctcc aggtggagga ggagcggagg  
1320  
gtggctgacc agctccggga ccagctggag aagggaacc ttcgagtcaa gcagctgaag  
1380

1485

cggcagctgg aggaggccga ggaggaggca tcccgg  
1416

<210> 1966

<211> 472

<212> PRT

<213> Homo sapiens

<400> 1966

Arg	Leu	Gly	Gln	Glu	Leu	Asp	Asp	Ala	Thr	Met	Asp	Leu	Glu	Gln	Gln
1			5						10				15		
Arg	Gln	Leu	Val	Ser	Thr	Leu	Glu	Lys	Lys	Gln	Arg	Lys	Phe	Asp	Gln
		20						25					30		
Leu	Leu	Ala	Glu	Glu	Lys	Ala	Ala	Val	Leu	Arg	Ala	Val	Glu	Glu	Arg
		35					40					45			
Glu	Arg	Ala	Glu	Ala	Glu	Gly	Arg	Glu	Arg	Glu	Ala	Arg	Ala	Leu	Ser
	50					55					60				
Leu	Thr	Arg	Ala	Leu	Glu	Glu	Gln	Glu	Ala	Arg	Glu	Glu	Leu	Glu	
65				70					75				80		
Arg	Gln	Asn	Arg	Ala	Leu	Arg	Ala	Glu	Leu	Glu	Ala	Leu	Leu	Ser	Ser
		85							90				95		
Lys	Asp	Asp	Val	Gly	Lys	Ser	Val	His	Glu	Leu	Glu	Arg	Ala	Cys	Arg
		100						105					110		
Val	Ala	Glu	Gln	Ala	Ala	Asn	Asp	Leu	Arg	Ala	Gln	Val	Thr	Glu	Leu
	115					120					125				
Glu	Asp	Glu	Leu	Thr	Ala	Ala	Glu	Asp	Ala	Lys	Leu	Arg	Leu	Glu	Val
	130					135					140				
Thr	Val	Gln	Ala	Leu	Lys	Thr	Gln	His	Glu	Arg	Asp	Leu	Gln	Gly	Arg
145					150					155				160	
Asp	Glu	Ala	Gly	Glu	Arg	Arg	Arg	Gln	Leu	Ala	Lys	Gln	Leu	Arg	
		165						170					175		
Asp	Ala	Glu	Val	Glu	Arg	Asp	Glu	Glu	Arg	Lys	Gln	Arg	Thr	Leu	Ala
	180						185						190		
Val	Ala	Ala	Arg	Lys	Lys	Leu	Glu	Gly	Glu	Leu	Glu	Glu	Leu	Lys	Ala
	195					200					205				
Gln	Met	Ala	Ser	Ala	Gly	Gln	Gly	Lys	Glu	Glu	Ala	Val	Lys	Gln	Leu
	210				215						220				
Arg	Lys	Met	Gln	Ala	Gln	Met	Lys	Glu	Leu	Trp	Arg	Glu	Val	Glu	Glu
225				230						235				240	
Thr	Arg	Thr	Ser	Arg	Glu	Glu	Ile	Phe	Ser	Gln	Asn	Arg	Glu	Ser	Glu
		245						250					255		
Lys	Arg	Leu	Lys	Gly	Leu	Glu	Ala	Glu	Val	Leu	Arg	Leu	Gln	Glu	Glu
	260						265						270		
Leu	Ala	Ala	Ser	Asp	Arg	Ala	Arg	Arg	Gln	Ala	Gln	Gln	Asp	Arg	Asp
	275					280					285				
Glu	Met	Ala	Asp	Glu	Val	Ala	Asn	Gly	Asn	Leu	Ser	Lys	Ala	Ala	Ile
	290				295						300				
Leu	Glu	Glu	Lys	Arg	Gln	Leu	Glu	Gly	Arg	Leu	Gly	Gln	Leu	Glu	Glu
305					310					315				320	
Glu	Leu	Glu	Glu	Glu	Gln	Thr	Xaa	Ser	Glu	Leu	Leu	Asn	Asp	Arg	Tyr
		325						330					335		
Arg	Lys	Leu	Leu	Leu	Gln	Val	Glu	Ser	Leu	Thr	Thr	Glu	Leu	Ser	Ala
	340						345					350			
Glu	Arg	Ser	Phe	Ser	Ala	Lys	Ala	Glu	Ser	Gly	Arg	Gln	Gln	Leu	Glu

355 360 365  
 Arg Gln Ile Gln Glu Leu Arg Gly Arg Leu Gly Glu Glu Asp Ala Gly  
 370 375 380  
 Ala Arg Ala Arg His Lys Met Thr Ile Ala Ala Leu Glu Ser Lys Leu  
 385 390 395 400  
 Ala Gln Ala Glu Glu Gln Leu Glu Gln Glu Thr Arg Glu Arg Ile Leu  
 405 410 415  
 Ser Gly Lys Leu Val Pro Lys Ser Lys Lys Arg Phe Lys Glu Val Val  
 420 425 430  
 Leu Gln Val Glu Glu Glu Arg Arg Val Ala Asp Gln Leu Arg Asp Gln  
 435 440 445  
 Leu Glu Lys Gly Asn Leu Arg Val Lys Gln Leu Lys Arg Gln Leu Glu  
 450 455 460  
 Glu Ala Glu Glu Glu Ala Ser Arg  
 465 470

&lt;210&gt; 1967

&lt;211&gt; 401

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1967

aaatttgaat cctggaaaagc tgatctcgat aagtcgtttg tcgagctgtt tgcggcggtt  
 60  
 ccgacgcgcc taatttggat cgtgcagtaa gagcttctcc attcctcggc gccaaagggg  
 120  
 tgcattcacat ctgcgggcca gtcagctccc ctgggcttgc actcgtcgga gatgctggcc  
 180  
 ttgcaccaga tcctctgtgg ggcgtcgggt gtggctgggc attccagtcg gcagcttggt  
 240  
 tagtggactg taccggatct catttggctg accggaccgc cttagatagg gcgcttcgca  
 300  
 gttatcatcg ataccaccgg cattctcttg ggtggcatga acgcctcatc tctagatatg  
 360  
 caaacggcgc gggttttcat gcgctcgaga agctgatgct g  
 401

&lt;210&gt; 1968

&lt;211&gt; 94

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1968

Met His His Ile Ser Arg Pro Val Ser Ser Pro Gly Leu Ala Leu Val  
 1 5 10 15  
 Gly Asp Ala Gly Leu Ala Pro Asp Pro Leu Trp Gly Val Gly Cys Gly  
 20 25 30  
 Trp Ala Phe Gln Ser Ala Ala Trp Leu Val Asp Cys Thr Gly Ser His  
 35 40 45  
 Leu Ala Asp Arg Thr Ala Leu Asp Arg Ala Leu Arg Ser Tyr His Arg  
 50 55 60  
 Tyr His Arg His Ser Leu Gly Trp His Glu Arg Leu Ile Ser Arg Tyr  
 65 70 75 80  
 Ala Asn Gly Arg Gly Phe His Ala Leu Glu Lys Leu Met Leu

85

90

<210> 1969  
 <211> 464  
 <212> DNA  
 <213> Homo sapiens

<400> 1969  
 nncatcgacg cgactggac tcactctgggt gacggccac agatggacac tctgcgcgag  
 60  
 gaggtcgccg ttcaccgcgt cacggatgct gtcacctgc tcggtcacgt cgccaacacc  
 120  
 caggtcatgg cgaccagcg tgatctcaaa ccgtcagtat tcgtcaacct ctccctctcg  
 180  
 gaaggacttc ctgtatcaat gatggaggtt gcttccctcg gtatcccat tategcgact  
 240  
 ggcgtcgccg gagtaggaga aatcgtctcg tctgacaacg ggcattctatt gcctgccgag  
 300  
 ttcaccgaca cccaggcatc tgacgcgtta gtgcagctgg cacgtctgtc tgaggacgag  
 360  
 taccagcagg tgtgtcaggc ctcccgccag gtgtgggaag aaaagtccg cgcctctgtc  
 420  
 gtctaccccg aattctgtcg cgagtgtgg ggcgacgctg atca  
 464

<210> 1970  
 <211> 154  
 <212> PRT  
 <213> Homo sapiens

<400> 1970  
 Xaa Ile Asp Ala His Trp Thr His Leu Gly Asp Gly Pro Gln Met Asp  
 1 5 10 15  
 Thr Leu Arg Glu Glu Val Ala Val His Arg Val Thr Asp Ala Val Thr  
 20 25 30  
 Leu Leu Gly His Val Ala Asn Thr Gln Val Met Ala Thr Gln Arg Asp  
 35 40 45  
 Leu Lys Pro Ser Val Phe Val Asn Leu Ser Ser Ser Glu Gly Leu Pro  
 50 55 60  
 Val Ser Met Met Glu Val Ala Ser Leu Gly Ile Pro Ile Ile Ala Thr  
 65 70 75 80  
 Gly Val Gly Gly Val Gly Glu Ile Val Ser Ser Asp Asn Gly His Leu  
 85 90 95  
 Leu Pro Ala Glu Phe Thr Asp Thr Gln Ala Ser Asp Ala Leu Val Gln  
 100 105 110  
 Leu Ala Arg Leu Ser Glu Asp Glu Tyr Gln Gln Val Cys Gln Ala Ser  
 115 120 125  
 Arg Gln Val Trp Glu Glu Lys Phe Arg Ala Ser Val Val Tyr Pro Glu  
 130 135 140  
 Phe Cys Arg Glu Cys Trp Gly Asp Ala Asp  
 145 150

<210> 1971  
 <211> 520

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1971

```

accggttgta ggtgtacaaa cactgctgac atcagccagc tcctgagtgt caggagagac
60
acagaagtac tcagggtgtt tgtgtgttga ccgagagaa agctcagatt gaggaacgag
120
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&lt;210&gt; 1972

&lt;211&gt; 118

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1972

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Glu Ile Ser Gly Lys Met Asn Thr Tyr Met Asn Ser Thr Thr Ser Lys
20     25     30
Lys Asp Thr Gly Val Gln Thr Asp Asp Leu Asn Ile Gly Ile Phe Thr
35     40     45
Asn Ala Glu Ser His Cys Gly Ser Leu Met Glu Arg Asp Ile Thr Asn
50     55     60
Cys Ser Ser Pro Glu Ile Ser Ala Glu Leu Ile Gly Gln Phe Ser Thr
65     70     75     80
Lys Lys Asn Lys Gln Glu Leu Thr Gln Asp Lys Gly Ala Ser Leu Glu
85     90     95
Lys Glu Asn Asn Arg Cys Asn Asp Gln Cys Asn Gln Phe Thr Arg Ile
100    105    110
Glu Lys Gln Thr Lys Gln
115

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&lt;210&gt; 1973

&lt;211&gt; 331

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1973

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 Glu Glu Leu Gln Ala Met Asn Ser Asp Thr Arg Phe Thr Thr Ser Val  
 35 40 45  
 Gly Ile Asp Leu Ser Pro Ala Arg Ser Phe Ser Ala Trp Ala Leu Arg  
 50 55 60  
 Gly Thr Thr Phe Ser Ala Pro Ser Met Thr Lys Ala Ser Arg Ser Ser  
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 35 40 45  
 Val Gly Val Gly Leu Cys Leu Arg Arg Asp Val Ala Arg Ser Leu Arg  
 50 55 60  
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 65 70 75 80  
 Leu Leu Pro Arg Leu Ala Gln Leu Gly Ala His Cys Thr Gln Arg Ile  
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<210> 1977  
 <211> 551  
 <212> DNA  
 <213> Homo sapiens

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 420  
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<210> 1978  
 <211> 101  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 1978

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Val Val Ala Pro Phe Ser Ser Ser Thr Ser Leu Met Phe Gln Leu Glu
          20          25          30
Pro Leu Pro Ala Val Ser Pro Thr Ser Phe Ile Pro Pro Val Thr Arg
          35          40          45
Glu Val Gln Ile Phe Gln Pro Gly His Cys Leu Pro Ser Arg Leu Ala
          50          55          60
Pro Pro Val His Leu Leu Cys Ser Ser Leu Cys Asn Ser Leu Ala Ala
65          70          75          80
Cys Leu Leu Ser Pro Leu Thr Gln Leu Leu Thr Cys Pro Thr Pro Ala
          85          90          95
Gln Pro Thr Ser Ser
          100

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&lt;210&gt; 1979

&lt;211&gt; 5530

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1979

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960

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<210> 1980

<211> 929

<212> PRT

<213> Homo sapiens

<400> 1980

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Gln Pro Pro Thr Ala Ala Ala Ala Gln Pro Arg Arg Arg Gln Gly
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Glu Glu Val Gln Glu Arg Ala Glu Pro Pro Gly His Pro His Pro Leu
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Ala Gln Arg Arg Arg Ser Lys Gly Leu Val Gln Asn Ile Asp Gln Leu
65           70           75           80
Tyr Ser Gly Gly Gly Lys Val Gly Tyr Leu Val Tyr Ala Gly Gly Arg
85           90           95
Arg Phe Leu Leu Asp Leu Glu Arg Asp Gly Ser Val Gly Ile Ala Gly
100          105          110
Phe Val Pro Ala Gly Gly Gly Thr Ser Ala Pro Trp Arg His Arg Ser
115          120          125
His Cys Phe Tyr Arg Gly Thr Val Asp Ala Ser Pro Arg Ser Leu Ala
130          135          140
Val Phe Asp Leu Cys Gly Gly Leu Asp Gly Phe Phe Ala Val Lys His
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Ala Arg Tyr Thr Leu Lys Pro Leu Leu Arg Gly Pro Trp Ala Glu Glu
165          170          175
Glu Lys Gly Arg Val Tyr Gly Asp Gly Ser Ala Arg Ile Leu His Val
180          185          190
Tyr Thr Arg Arg Ala Ser Ala Ser Arg Pro Cys Arg Arg Ala Pro Ala
195          200          205
Ala Lys Pro Pro Arg Pro His Arg Arg Pro Thr Ser Met Leu Arg Arg
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Val Ala Asp Ala Ser Met Ala Arg Leu Tyr Gly Arg Gly Leu Gln His
275          280          285
Tyr Leu Leu Thr Leu Ala Ser Ile Ala Asn Arg Leu Tyr Ser His Ala
290          295          300
Ser Ile Glu Asn His Ile Arg Leu Ala Val Val Lys Val Val Val Leu
305          310          315          320
Gly Asp Lys Asp Lys Ser Leu Glu Val Ser Lys Asn Ala Ala Thr Thr
325          330          335
Leu Lys Asn Phe Cys Lys Trp Gln His Gln His Asn Gln Leu Gly Asp
340          345          350
Asp His Glu Glu His Tyr Asp Ala Ala Ile Leu Phe Thr Arg Glu Asp
355          360          365
Leu Cys Gly His His Ser Cys Asp Thr Leu Gly Met Ala Asp Val Gly
370          375          380
Thr Ile Cys Ser Pro Glu Arg Ser Cys Ala Val Ile Glu Asp Asp Gly
385          390          395          400
Leu His Ala Ala Phe Thr Val Ala His Glu Ile Gly His Leu Leu Gly
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420          425          430
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Arg	Ile	Cys	Leu	Gln	Gly	Lys	Cys	Val	Asp	Lys	Thr	Lys	Lys	Lys	Tyr
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Tyr	Ser	Thr	Ser	Ser	His	Gly	Asn	Trp	Gly	Ser	Trp	Gly	Ser	Trp	Gly
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Gln	Cys	Ser	Arg	Ser	Cys	Gly	Gly	Gly	Val	Gln	Phe	Ala	Tyr	Arg	His
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Cys	Asn	Asn	Pro	Ala	Pro	Arg	Asn	Asn	Gly	Arg	Tyr	Cys	Thr	Gly	Lys
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Arg	Phe	Thr	Ala	Tyr	Leu	Ala	Leu	Lys	Lys	Lys	Asn	Gly	Glu	Tyr	Leu
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Ile	Asn	Gly	Lys	Tyr	Met	Ile	Ser	Thr	Ser	Glu	Thr	Ile	Ile	Asp	Ile
785					790				795						800

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Arg Thr Val Gln Cys Gln Asp Gly Asn Arg Lys Leu Ala Lys Gly Cys
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<210> 1981  
 <211> 327  
 <212> DNA  
 <213> Homo sapiens

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<210> 1982  
 <211> 107  
 <212> PRT  
 <213> Homo sapiens

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<400> 1982
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35     40     45
Ser Pro Pro Lys Ala Ala Gly Gly Arg Cys Pro Gly Pro Cys Arg
50     55     60
Ile Met Ala Trp Pro Gly Gln Arg Ala Ser Ser Ser Gly Arg Gly Arg
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<210> 1983  
 <211> 383  
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&lt;210&gt; 1984

&lt;211&gt; 127

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1984

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			20					25					30		
Ala	Gln	Pro	Glu	Glu	Arg	Asn	Val	Pro	Lys	Arg	Asp	Ala	Ser	Val	Phe
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			85						90					95	
Val	Leu	Ala	Ile	Phe	Asn	Val	Pro	His	Asp	His	Pro	Asp	Pro	Ala	Gly
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&lt;210&gt; 1985

&lt;211&gt; 381

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1985

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 Gly Gly Arg Pro Thr Thr Phe Ala Arg Pro Phe Ala Asp Thr Arg Val  
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&lt;213&gt; Homo sapiens

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 Ile Gly Phe Met Gly Val Arg Thr Met Ile Asn Arg Tyr Leu Leu Arg  
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 Thr Pro Asp Lys Gln Ala Leu Glu Val Pro Gln Tyr Phe Trp Met Arg  
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 85 90 95  
 Ser Thr Leu Val Asn Ala Gly Thr His Xaa Ala Gln Leu Ser Asn Cys  
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&lt;210&gt; 1989

&lt;211&gt; 10795

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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<211> 2971

<212> PRT

<213> Homo sapiens

<400> 1990

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Leu	Leu	Ser	Gln	Ser	Leu	Asn	Gln	Pro	Leu	Thr	Ser	Ser	Lys	Ala	Gly
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Ser	Ser	Pro	Cys	Leu	Gly	Ser	Ser	Ser	Ala	Ala	Ser	Ser	Pro	Pro	Pro
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Asp	Ser	Asp	Thr	Arg	Asp	Gly	Pro	Glu	Glu	Gly	Ala	Glu	Glu	Glu	Pro
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Pro	Gln	Val	Leu	Glu	Ile	Lys	Pro	Pro	Pro	Ser	Ala	Val	Thr	Gln	Arg
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Cys Glu Lys Gly Asn Trp Gly Pro His Leu Ile Ile Val Pro Thr Ser		
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                     2580                      2585                      2590  
 Thr Pro Pro Ala Val Lys Arg Arg Arg Gly Arg Pro Pro Lys Lys Asn  
                     2595                      2600                      2605  
 Arg Ser Pro Ala Asp Ala Gly Arg Gly Val Asp Glu Ala Pro Ser Ser  
                     2610                      2615                      2620  
 Thr Leu Lys Gly Lys Thr Asn Gly Ala Asp Pro Val Pro Gly Pro Glu  
 2625                      2630                      2635                      2640  
 Thr Leu Ile Val Ala Asp Pro Val Leu Glu Pro Gln Leu Ile Pro Gly  
                     2645                      2650                      2655  
 Pro Gln Pro Leu Gly Pro Gln Pro Val His Arg Pro Asn Pro Leu Leu  
                     2660                      2665                      2670  
 Ser Pro Val Glu Lys Arg Arg Arg Gly Arg Pro Pro Lys Ala Arg Asp  
                     2675                      2680                      2685  
 Leu Pro Ile Pro Gly Thr Ile Ser Ser Ala Gly Asp Gly Asn Ser Glu  
                     2690                      2695                      2700  
 Ser Arg Thr Gln Pro Pro Pro His Pro Ser Pro Leu Thr Pro Leu Pro  
 2705                      2710                      2715                      2720  
 Pro Leu Leu Val Cys Pro Thr Ala Thr Val Ala Asn Thr Val Thr Thr  
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 Val Thr Ile Ser Thr Ser Pro Pro Lys Arg Lys Arg Gly Arg Pro Pro  
                     2740                      2745                      2750  
 Lys Asn Pro Pro Ser Pro Arg Pro Ser Gln Leu Pro Val Leu Asp Arg  
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 Asp Ser Thr Ser Val Leu Glu Ser Cys Gly Leu Gly Arg Arg Arg Gln  
                     2770                      2775                      2780  
 Pro Gln Gly Gln Gly Glu Ser Glu Gly Ser Ser Ser Asp Glu Asp Gly  
 2785                      2790                      2795                      2800  
 Ser Arg Pro Leu Thr Arg Leu Ala Arg Leu Arg Leu Glu Ala Glu Gly  
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 Met Arg Gly Arg Lys Ser Gly Gly Ser Met Val Val Ala Val Ile Gln  
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 Pro Pro Val Val Ser Leu Thr Pro Lys Leu Arg Ser Thr Arg Leu Arg  
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 2865                      2870                      2875                      2880  
 Arg Ala Gly Ala Pro Val Gly Gly Ser Pro Gly Leu Ala Lys Arg Gly



	2885		2890		2895
Arg	Leu	Gln	Pro	Pro	Ser
	2900		2905		2910
Ser	Glu	Ala	Glu	Ala	Ser
	2915		2920		2925
Arg	Arg	Arg	Pro	Gly	Pro
	2930		2935		2940
Asp	Gln	Arg	Ile	Leu	Arg
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Ala	Val	Ser	His	Arg	Gly
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&lt;210&gt; 1991

&lt;211&gt; 3102

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1991

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2700

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<210> 1992

<211> 733

<212> PRT

<213> Homo sapiens

<400> 1992

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 Gly Pro Arg Leu Leu Pro Pro Glu Cys Arg Ser Val Ala Cys Val Gln  
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 35 40 45  
 Arg Ile Pro Gly Gly Tyr Val Thr Asn His Ile Tyr Thr Trp Val Asp  
 50 55 60  
 Pro Gln Gly Arg Ser Ile Ser Pro Pro Ser Gly Leu Pro Gln Pro His  
 65 70 75 80  
 Gly Gly Ala Leu Arg Gln Gln Glu Gly Asp Arg Arg Ser Thr Leu His  
 85 90 95  
 Leu Leu Gln Gly Gly Asp Glu Lys Lys Val Asn Leu Val Leu Gly Asp  
 100 105 110  
 Gly Arg Ser Leu Gly Leu Thr Ile Arg Gly Gly Ala Glu Tyr Gly Leu  
 115 120 125  
 Gly Ile Tyr Ile Thr Gly Val Asp Pro Gly Ser Glu Ala Glu Gly Ser  
 130 135 140  
 Gly Leu Lys Val Gly Asp Gln Ile Leu Glu Val Asn Gly Arg Ser Phe  
 145 150 155 160  
 Leu Asn Ile Leu His Asp Glu Ala Val Arg Leu Lys Ser Ser Arg  
 165 170 175  
 His Leu Ile Leu Thr Val Lys Asp Val Gly Arg Leu Pro His Ala Arg  
 180 185 190  
 Thr Thr Val Asp Glu Thr Lys Trp Ile Ala Ser Ser Arg Ile Arg Glu  
 195 200 205  
 Thr Met Ala Asn Ser Ala Gly Phe Leu Gly Asp Leu Thr Thr Glu Gly  
 210 215 220  
 Ile Asn Lys Pro Gly Phe Tyr Lys Gly Pro Ala Gly Ser Gln Val Thr  
 225 230 235 240  
 Leu Ser Ser Leu Gly Asn Gln Thr Arg Val Leu Leu Glu Glu Gln Ala  
 245 250 255  
 Arg His Leu Leu Asn Glu Gln Glu His Thr Thr Met Ala Tyr Tyr Leu

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      260      265      270
Asp Glu Tyr Arg Gly Gly Ser Val Ser Val Glu Ala Leu Val Met Ala
      275      280      285
Leu Phe Lys Leu Leu Asn Thr His Ala Lys Phe Ser Leu Leu Ser Glu
      290      295      300
Val Arg Gly Thr Ile Ser Pro Gln Asp Leu Glu Arg Phe Asp His Leu
      305      310      315      320
Val Leu Arg Arg Glu Ile Glu Ser Met Lys Ala Arg Gln Pro Pro Gly
      325      330      335
Pro Gly Ala Gly Asp Thr Tyr Ser Met Val Ser Tyr Ser Asp Thr Gly
      340      345      350
Ser Ser Thr Gly Ser His Gly Thr Ser Thr Thr Val Ser Ser Ala Arg
      355      360      365
Asn Thr Leu Asp Leu Glu Glu Thr Gly Glu Ala Val Gln Gly Asn Ile
      370      375      380
Asn Ala Leu Pro Asp Val Ser Val Asp Asp Val Arg Ser Thr Ser Gln
      385      390      395      400
Gly Leu Ser Ser Phe Lys Pro Leu Pro Arg Pro Pro Pro Leu Ala Gln
      405      410      415
Gly Asn Asp Leu Pro Leu Gly Gln Pro Arg Lys Leu Gly Arg Glu Asp
      420      425      430
Leu Gln Pro Pro Ser Ser Met Pro Ser Cys Ser Gly Thr Val Phe Ser
      435      440      445
Ala Pro Gln Asn Arg Ser Pro Pro Ala Gly Thr Ala Pro Thr Pro Gly
      450      455      460
Thr Ser Ser Ala Gln Asp Leu Pro Ser Ser Pro Ile Tyr Ala Ser Val
      465      470      475      480
Ser Pro Ala Asn Pro Ser Ser Lys Arg Pro Leu Asp Ala His Leu Ala
      485      490      495
Leu Val Asn Gln His Pro Ile Gly Pro Phe Pro Arg Val Gln Ser Pro
      500      505      510
Pro His Leu Lys Ser Pro Ser Ala Glu Ala Thr Val Ala Gly Gly Cys
      515      520      525
Leu Leu Pro Pro Ser Pro Ser Gly His Pro Asp Gln Thr Gly Thr Asn
      530      535      540
Gln His Phe Val Met Val Glu Val His Arg Pro Asp Ser Glu Pro Asp
      545      550      555      560
Val Asn Glu Val Arg Ala Leu Pro Gln Thr Arg Thr Ala Ser Thr Leu
      565      570      575
Ser Gln Leu Ser Asp Ser Gly Gln Thr Leu Ser Glu Asp Ser Gly Val
      580      585      590
Asp Ala Gly Glu Ala Glu Ala Ser Ala Pro Gly Arg Gly Arg Gln Ser
      595      600      605
Val Ser Thr Lys Ser Arg Ser Ser Lys Glu Leu Pro Arg Asn Glu Arg
      610      615      620
Pro Thr Asp Gly Ala Asn Lys Pro Pro Gly Leu Leu Glu Pro Thr Ser
      625      630      635      640
Thr Leu Val Arg Val Lys Lys Ser Ala Ala Thr Leu Gly Ile Ala Ile
      645      650      655
Glu Gly Gly Ala Asn Thr Arg Gln Pro Leu Pro Arg Ile Val Thr Ile
      660      665      670
Gln Arg Gly Gly Ser Ala His Asn Cys Gly Gln Leu Lys Val Gly His
      675      680      685
Val Ile Leu Glu Val Asn Gly Leu Thr Leu Arg Gly Lys Glu His Arg

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690		695		700
Glu Ala Ala Arg Ile Ile Ala Glu Ala Phe Lys Thr Lys Asp Arg Asp				
705		710		715
Tyr Ile Asp Phe Leu Val Thr Glu Phe Asn Val Met Leu				720
	725		730	

<210> 1993  
 <211> 957  
 <212> DNA  
 <213> Homo sapiens

<400> 1993  
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 420  
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 600  
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 660  
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 720  
 ggatcccgct cctccccgct cccgagcccc tgggagctac gcccgacgt cttaccactg  
 780  
 ctgcgatcct cagcatgacc ctccgtgcct cagccgctga ccactccacc tggcggttgc  
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<210> 1994  
 <211> 224  
 <212> PRT  
 <213> Homo sapiens

<400> 1994  
 Xaa Lys Thr Tyr Gly Met Thr Arg Ala Leu Asp His Ile Asp Ile Ala  
 1 5 10 15  
 Ile Pro Ala Gly Gln Ser Val Ala Val Met Gly Pro Ser Gly Ser Gly

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      20      25      30
Lys Thr Thr Leu Leu His Cys Leu Ser Gly Ile Leu Ser Pro Asp Ser
      35      40      45
Gly Ser Ile Glu Leu Ala Leu Pro Asp Arg Thr Val Asn Val Glu Asn
      50      55      60
Leu Ser Asn Glu Gly Arg Ala Lys Leu Arg Arg Gln Ser Leu Gly Phe
      65      70      75      80
Val Phe Gln Gln Gly Met Leu Val Pro Glu Leu Thr Ala Val Glu Asn
      85      90      95
Thr Ala Leu Pro Leu Met Leu Asn Gly Val Ser Gln Thr Asp Ala Val
      100      105      110
Arg Tyr Ala Thr Gln Trp Leu Glu Ser Met Gly Leu Gly Gly Met Glu
      115      120      125
Asp Arg Arg Ile Gly Gln Leu Ser Gly Gly Gln Ala Gln Arg Val Thr
      130      135      140
Ile Ala Arg Ser Gln Val Ile Asp Pro Ser Ile Val Phe Ala Asp Glu
      145      150      155      160
Pro Thr Gly Ala Leu Asp Ser Ala Thr Ala Val Glu Val Met Ala Ile
      165      170      175
Leu Leu Ser Ala Thr Thr Gly Arg Gly Arg Thr Leu Val Val Thr
      180      185      190
His Asp Glu Asp Val Ala Arg Arg Cys Gln Arg Ile Leu His Leu His
      195      200      205
Asp Gly Arg Ile Val Ser Asp His Val Arg His Ser Asp Gly Arg Trp
      210      215      220

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&lt;210&gt; 1995

&lt;211&gt; 285

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1995

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120
actgtcctca tcatgtgtga cttggactgt ggaccagccc ctcgggctct gctctgtga
180
cctatattct ttgtctcttg ttctgagaa gctgggagtt gagaccagtt aaggtgttgt
240
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285

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&lt;210&gt; 1996

&lt;211&gt; 59

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1996

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His His His His Tyr Gln His His His His His Tyr His Leu Tyr
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His His His His His His His His His His Tyr His His His Ala
20      25      30
His His His Val Met Thr Leu Asn Thr Val Leu Ile Met Cys Asp Leu

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<210> 1997  
 <211> 313  
 <212> DNA  
 <213> Homo sapiens

<400> 1997  
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 120  
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<210> 1998  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

<400> 1998  
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 Glu Met Leu Val Gly Leu Ala Ile Gly Gly Gly Ile Gly Phe Tyr Asp  
 35 40 45  
 Gly Leu Phe Gly Pro Gly Thr Gly Ser Phe Leu Met Phe Leu Phe Val  
 50 55 60  
 Arg Phe Leu Arg Phe Asp Phe Leu His Ala Ser Ala Ala Ala Lys Val  
 65 70 75 80  
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 Gly Asn Val Leu Tyr Gly Tyr Ala  
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<210> 1999  
 <211> 399  
 <212> DNA  
 <213> Homo sapiens

<400> 1999  
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ggaagaatgg atcttactct cgctgaccct gagattgtcg ttaacaatgg cgatgatcat  
 180  
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 300  
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<210> 2000

<211> 91

<212> PRT

<213> Homo sapiens

<400> 2000

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		20						25					30		
Val	Asp	Tyr	Gly	Arg	Ile	Thr	Phe	Val	Asp	Met	Thr	Gly	Ser	Ile	Thr
		35				40						45			
Gln	Gly	Gln	Asn	Asp	Ala	Ala	Gln	Val	Val	Gly	Thr	Asn	Val	Lys	Leu
	50				55						60				
Asn	Ser	Gln	Ala	Val	Asp	Ala	Phe	Ala	Gly	Phe	Tyr	Gln	Ala	Gly	Lys
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Pro	Met	Asp	Asp	Ile	Asp	Ser	Ser	Leu	Lys	Leu					
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<210> 2001

<211> 1434

<212> DNA

<213> Homo sapiens

<400> 2001

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 180  
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 240  
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 300  
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 420  
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 480  
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 540



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 720  
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 780  
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<210> 2002

<211> 79

<212> PRT

<213> Homo sapiens

<400> 2002

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Arg	Arg	Asp	Lys	Phe	Gly	Arg	Thr	Pro	Leu	His	Tyr	Ala	Ala	Ala	Asn
		20						25					30		
Gly	Ser	Tyr	Gln	Cys	Ala	Val	Thr	Leu	Val	Thr	Ala	Gly	Ala	Gly	Val
		35					40					45			
Asn	Glu	Ala	Asp	Cys	Lys	Gly	Cys	Ser	Pro	Leu	His	Tyr	Ala	Ala	Ala
	50					55					60				
Ser	Asp	Thr	Tyr	Arg	Xaa	Ser	Gly	Thr	Pro	Tyr	Thr	Phe	Gln	Pro	
65					70					75					

<210> 2003

<211> 688

<212> DNA

<213> Homo sapiens

<400> 2003

ntcattgacta cggagacact gaagaaaatt cagattgata ggcagttttt cagcgtgtg  
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 attgcagata ccattaagga gttgcaagat tcggccactt acaacagtct cctgcaagct  
 120  
 ttgagcaaag agagggaaaa caaatgcat ttctatgaca tcatttccag ggagggaaaa  
 180  
 ggaagaaaac agataatatc acttcaaaaa cagctaatta atttcaaaaa ggaatggcaa  
 240  
 tttgaagtcc agagtcagaa tgagtatat gctaacctca aggaccaact gcaagagatg  
 300  
 aaggcaaat ccaacttgga gaatcgctac atgaaaacca ataccgagct gcagattgcc  
 360  
 cagaccaga aaaagtgtaa cagaacagag gaactcttgg tggaagagat tgagaaactc  
 420  
 aggatgaaaa ccgaagaaga ggcccggact catacagaga ttgaaatgtt ccttagaaaag  
 480  
 gagcgcagg tgggtcccca cagcttttct atgctttgac ttttttttg tactctgctt  
 540  
 atactgagga aacaaaaaga atattttgaa ggaaaaccaa ccattattct ttcagcctaa  
 600  
 tgaactttag ctcatgtttt ctttcagggt tatgcatctg aatagatatc ttatatagct  
 660  
 gtaatttgag agagtgcagg taaaattg  
 688

&lt;210&gt; 2004

&lt;211&gt; 172

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2004

Xaa	Met	Thr	Thr	Thr	Leu	Lys	Lys	Ile	Gln	Ile	Asp	Arg	Gln	Phe
1			5				10					15		
Phe	Ser	Asp	Val	Ile	Ala	Asp	Thr	Ile	Lys	Glu	Leu	Gln	Asp	Ser
		20					25					30		Ala
Thr	Tyr	Asn	Ser	Leu	Leu	Gln	Ala	Leu	Ser	Lys	Glu	Arg	Glu	Asn
		35				40					45			Lys
Met	His	Phe	Tyr	Asp	Ile	Ile	Ser	Arg	Glu	Glu	Lys	Gly	Arg	Lys
	50					55				60				Gln
Ile	Ile	Ser	Leu	Gln	Lys	Gln	Leu	Ile	Asn	Phe	Lys	Lys	Glu	Trp
65				70					75					80
Phe	Glu	Val	Gln	Ser	Gln	Asn	Glu	Tyr	Ile	Ala	Asn	Leu	Lys	Asp
			85					90					95	Gln
Leu	Gln	Glu	Met	Lys	Ala	Lys	Ser	Asn	Leu	Glu	Asn	Arg	Tyr	Met
		100					105					110		Lys
Thr	Asn	Thr	Glu	Leu	Gln	Ile	Ala	Gln	Thr	Gln	Lys	Lys	Cys	Asn
		115				120					125			Arg
Thr	Glu	Glu	Leu	Leu	Val	Glu	Glu	Ile	Glu	Lys	Leu	Arg	Met	Lys
	130				135					140				Thr
Glu	Glu	Glu	Ala	Arg	Thr	His	Thr	Glu	Ile	Glu	Met	Phe	Leu	Arg
145				150					155					Lys
Glu	Gln	Gln	Val	Gly	Pro	His	Ser	Phe	Ser	Met	Leu			
			165						170					

<210> 2005  
 <211> 354  
 <212> DNA  
 <213> Homo sapiens

<400> 2005  
 gctagcacca agccaagggt atgtttcctt gcttgcattg ggggtttctg gccagtcagc  
 60  
 caagtgaact gattgacccc cagccctgtg gggaatttca ggggggtatt gtcttgggtca  
 120  
 tcggagtcag ggggtggcctt tnagccaagg ctgcattaac ttttgggaaa agaaatggga  
 180  
 agcccgccgt gtcacagggt ctctgaccg gctgggtagg gtttggcctt atcttacagc  
 240  
 cagtgtgtgt tttgtcaga tggacgcaca tggaaaccag gctaggatca tcttcccaat  
 300  
 gtctactccc tgctttgggtc tgcctgaaa acaattgcaa agacattgtg gctg  
 354

<210> 2006  
 <211> 111  
 <212> PRT  
 <213> Homo sapiens

<400> 2006  
 Met Phe Pro Cys Leu His Val Gly Phe Leu Ala Ser Gln Pro Ser Glu  
 1 5 10 15  
 Leu Ile Asp Pro Gln Pro Cys Gly Glu Phe Gln Gly Gly Ile Val Leu  
 20 25 30  
 Val Ile Gly Val Arg Gly Gly Leu Xaa Ala Lys Ala Ala Leu Thr Phe  
 35 40 45  
 Gly Lys Arg Asn Gly Lys Pro Ala Val Ser Gln Gly Leu Leu Thr Gly  
 50 55 60  
 Trp Val Gly Phe Gly Leu Ile Leu Gln Pro Val Leu Cys Leu Leu Arg  
 65 70 75 80  
 Trp Thr His Met Glu Thr Arg Leu Gly Ser Ser Ser Gln Cys Leu Leu  
 85 90 95  
 Pro Ala Leu Val Cys Pro Glu Asn Asn Cys Lys Asp Ile Val Ala  
 100 105 110

<210> 2007  
 <211> 335  
 <212> DNA  
 <213> Homo sapiens

<400> 2007  
 nnacgcgtgc catgtgcatg tgtatatgca tgtatgtgcg tatgtgtgtg catgtgtgtg  
 60  
 tgtatatgca tgtgtgtatg tgcattgtacg tgttngtgca tatgcgtgtg catgcatgcg  
 120  
 tgtgcgtatg tgtgcatann catgtgcaca catgtacaca cgtgtacatg ttcattgcatg  
 180  
 tgcacgtgca tatgtgtaca cgtgtatgcg tgtacatgta tgagcatatg tacacgtgtg  
 240

gatgtgtgtg tatgcatgtg tgtgtgcaca gatatgcctt ttcctttcat acaggctggt  
 300  
 ttgagtattg ctggtaggca gggacaactt tccgt  
 335

<210> 2008  
 <211> 111  
 <212> PRT  
 <213> Homo sapiens

<400> 2008  
 Xaa Arg Val Pro Cys Ala Cys Val Tyr Ala Cys Met Cys Val Cys Val  
 1 5 10 15  
 Cys Met Cys Val Cys Ile Cys Met Cys Val Cys Ala Cys Thr Cys Xaa  
 20 25 30  
 Cys Ile Cys Val Cys Met His Ala Cys Ala Tyr Val Cys Ile Xaa Met  
 35 40 45  
 Cys Thr His Val His Thr Cys Thr Cys Ser Cys Met Cys Thr Cys Ile  
 50 55 60  
 Cys Val His Val Tyr Ala Cys Thr Cys Met Ser Ile Cys Thr Arg Val  
 65 70 75 80  
 Asp Val Cys Val Cys Met Cys Val Cys Thr Asp Met Pro Phe Pro Phe  
 85 90 95  
 Ile Gln Ala Gly Leu Ser Ile Ala Gly Arg Gln Gly Gln Leu Ser  
 100 105 110

<210> 2009  
 <211> 288  
 <212> DNA  
 <213> Homo sapiens

<400> 2009  
 gacatcacc cgtgctggc caacccaac ggtttctccg cagcgatcga ggaactggtg  
 60  
 ctgcgttccc cacgcgacat cgacgtggtc gtcggcatgg aggcctcgcg cttcctcttc  
 120  
 gcagctccgg tcgccctggc catcggggca ggattcgtgc cggcgcgcaa gccggggaag  
 180  
 ctccccggcc aggtgtattc cgagaccttt gccatggagt acgggggagga gaccctcacc  
 240  
 gtccaccagt acgccatcaa gccgggggtcg cgcgtcatca tcgtcgac  
 288

<210> 2010  
 <211> 96  
 <212> PRT  
 <213> Homo sapiens

<400> 2010  
 Asp Ile Thr Pro Leu Leu Ala Asn Pro Asn Gly Phe Ser Ala Ala Ile  
 1 5 10 15  
 Glu Glu Leu Val Leu Arg Ser Pro Arg Asp Ile Asp Val Val Val Gly  
 20 25 30  
 Met Glu Ala Arg Gly Phe Leu Phe Ala Ala Pro Val Ala Leu Ala Ile

					35						40						45
Gly	Ala	Gly	Phe	Val	Pro	Val	Arg	Lys	Pro	Gly	Lys	Leu	Pro	Gly	Gln		
					50						55						60
Val	Tyr	Ser	Glu	Thr	Phe	Ala	Met	Glu	Tyr	Gly	Glu	Glu	Thr	Leu	Thr		
					65						70						75
Val	His	Gln	Tyr	Ala	Ile	Lys	Pro	Gly	Ser	Arg	Val	Ile	Ile	Val	Asp		
					85						90						95

```
<210> 2011
<211> 384
<212> DNA
<213> Homo sapiens
```

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<400> 2011
ctcgcagcagt ctctgcatgt taacaccccc gtacggcccg taaagcataa ccgtctccga
60
cttgcgcgccg cctgcgtgct tcgctaggcg gccggtgaac ccacctgagg gccggatgta
120
gaagtcaacg gtggacgacg ggttgagggg tttgttgatt ggcgagtggg gaagcgagca
180
gattgtaaat tggtagaacg gggaacagag attagtcaaca atgacgagaa cgacaacaga
240
atgttgattg ttatagccat ctctggagga gagggaaaaa gccagggtatc tagacagcga
300
aagcaaatgt gagccgaggg gacagtgccg tccttcggtc ctcggcaact cccacgaggc
360
accttcatt ctgtgggcag aatt
384
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<210> 2012
<211> 123
<212> PRT
<213> Homo sapiens
```

```

<400> 2012
Met Glu Gly Ala Ser Trp Glu Leu Pro Arg Asn Glu Gly Arg His Cys
 1          5          10          15
Pro Leu Gly Ser His Leu Leu Ser Leu Ser Arg Tyr Leu Ala Phe Ser
 20          25          30
Leu Ser Ser Arg Asp Gly Tyr Asn Asn Gln His Ser Val Val Val Leu
 35          40          45
Val Ile Val Thr Asn Leu Cys Ser Pro Phe Tyr Gln Phe Thr Ile Cys
 50          55          60
Ser Leu Pro His Ser Pro Ile Asn Lys Pro Ser Asn Pro Ser Ser Thr
 65          70          75          80
Val Asp Phe Tyr Ile Arg Pro Ser Gly Gly Phe Thr Gly Arg Leu Ala
 85          90          95
Lys His Ala Gly Gly Gly Lys Ser Glu Thr Val Met Leu Tyr Gly Pro
 100          105          110
Tyr Gly Gly Val Asn Met Gln Arg Leu Leu Glu
 115          120

```

<210> 2013  
<211> 309

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2013

gcgtatcccc acggctacgg catgaccgcg cttatcggcc cggacctgtc caccgtcgaa  
 60  
 gccttgctcg cccaggtcca cagcacacaa accccgggtg acctggccaa tatcaatgcc  
 120  
 gataaccaga cggttatcgc gggcagcgac ggggcaatga aagcagtcgc caatctggtc  
 180  
 cgcggaacg gcgtcgccaa acgcttggcc gtcagcgtgc cgtccattg tgcgctgctg  
 240  
 gaaaaacctg ccgaaacact ggccaagcc ttcgctgaag tgacgctgaa aacgccgncn  
 300  
 nnnccnncn  
 309

&lt;210&gt; 2014

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2014

Ala	Tyr	Pro	His	Gly	Tyr	Gly	Met	Thr	Ala	Leu	Ile	Gly	Pro	Asp	Leu
1			5					10				15			
Ser	Thr	Val	Glu	Ala	Leu	Leu	Ala	Gln	Val	His	Ser	Thr	Gln	Thr	Pro
		20					25					30			
Val	Tyr	Leu	Ala	Asn	Ile	Asn	Ala	Asp	Asn	Gln	Thr	Val	Ile	Ala	Gly
	35					40				45					
Ser	Asp	Gly	Ala	Met	Lys	Ala	Val	Ala	Asn	Leu	Val	Arg	Gly	Asn	Gly
	50				55				60						
Val	Ala	Lys	Arg	Leu	Ala	Val	Ser	Val	Pro	Ser	His	Cys	Ala	Leu	Leu
65				70					75					80	
Glu	Lys	Pro	Ala	Glu	Thr	Leu	Ala	Gln	Ala	Phe	Ala	Glu	Val	Thr	Leu
			85					90						95	
Lys	Thr	Pro	Xaa	Xaa	Pro	Xaa									
			100												

&lt;210&gt; 2015

&lt;211&gt; 329

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2015

acgcgtgcca tgctcggat ccgcgccac caccctgtct ttgggaccgg cgagttcacc  
 60  
 gatctaggcg ggccggacat ggcagtgatg tccttctac gtcacaacga gcacgaaacg  
 120  
 gtcctgtgcc tggctaactc ctccgatact gagcggacgg ttgcccttca ccttccacaa  
 180  
 ttcgcgggcg tggcgggctc ttctctcacc catggtcagg acgcgcaacc agtaaaagct  
 240  
 gacggaacac tgtccgtacc gttgtggcca tatggctatc gatggctgca gatgtccggt  
 300

gaggagaggt catgaccgct tgggaagac  
329

<210> 2016  
<211> 104  
<212> PRT  
<213> Homo sapiens

<400> 2016  
Thr Arg Ala Met Leu Gly Ile Arg Arg His His Pro Val Phe Gly Thr  
1 5 10 15  
Gly Glu Phe Thr Asp Leu Gly Gly Pro Asp Met Ala Val Met Ser Phe  
20 25 30  
Leu Arg His Asn Glu His Glu Thr Val Leu Cys Leu Ala Asn Leu Ser  
35 40 45  
Asp Thr Glu Arg Thr Val Ala Leu His Leu Pro Gln Phe Ala Gly Val  
50 55 60  
Ala Gly Ser Ser Leu Ile His Gly Gln Asp Ala Gln Pro Val Lys Ala  
65 70 75 80  
Asp Gly Thr Leu Ser Val Pro Leu Trp Pro Tyr Gly Tyr Arg Trp Leu  
85 90 95  
Gln Met Ser Gly Glu Glu Arg Ser  
100

<210> 2017  
<211> 457  
<212> DNA  
<213> Homo sapiens

<400> 2017  
accaagggtca gattcatggc ctcttttcct ccagcggcca gcaggaaacg cggggagccc  
60  
ttgatcatct ccgacatcaa gaaaggcagc gtggcacaca ggacgggcac cctggagcca  
120  
ggcgacaagc tactggccat tgacaatatc cgcctggaca actgccccat ggaggacgcc  
180  
gtgcaaatcc tgcggcagtg cgaggacctg gtgaagctga agatccggaa ggacgaggac  
240  
aactctgatg agctggagac cacagggtgcc gtcagttaca cagtggagct gaagcgctac  
300  
gggggtcccc tgggcatcac catttcgggc acggaggaac cttttgaccc cattttcatc  
360  
tcaggcctcc ccaaactggg cctggctgag aggactggtg ccatccagtg ggggaaccgc  
420  
ttcggaccat aacaacgtta ttctcaggga cggacca  
457

<210> 2018  
<211> 143  
<212> PRT  
<213> Homo sapiens

<400> 2018  
Thr Lys Val Arg Phe Met Ala Ser Phe Pro Pro Ala Ala Ser Arg Lys

```

      1           5           10           15
Arg Gly Glu Pro Leu Ile Ile Ser Asp Ile Lys Lys Gly Ser Val Ala
      20           25           30
His Arg Thr Gly Thr Leu Glu Pro Gly Asp Lys Leu Leu Ala Ile Asp
      35           40           45
Asn Ile Arg Leu Asp Asn Cys Pro Met Glu Asp Ala Val Gln Ile Leu
      50           55           60
Arg Gln Cys Glu Asp Leu Val Lys Leu Lys Ile Arg Lys Asp Glu Asp
      65           70           75           80
Asn Ser Asp Glu Leu Glu Thr Thr Gly Ala Val Ser Tyr Thr Val Glu
      85           90           95
Leu Lys Arg Tyr Gly Gly Pro Leu Gly Ile Thr Ile Ser Gly Thr Glu
      100          105          110
Glu Pro Phe Asp Pro Ile Phe Ile Ser Gly Leu Pro Lys Arg Gly Leu
      115          120          125
Ala Glu Arg Thr Gly Ala Ile Gln Trp Gly Asn Arg Phe Gly Pro
      130          135          140

```

&lt;210&gt; 2019

&lt;211&gt; 483

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2019

```

cgcgctcggcg acgattttat cctcgggggtt cggtataccg ccgatgaatg tctcgagaac
60
ggcaccggca aggcggaagg catcgaaatc tccagacggc tgaaggagag cggcctgatc
120
gactatctca acgtcatcag gggacatatc gacaccgatc cgggctgac cgacgtcatc
180
cccattcagg gcatggcgag cgcgccgcat cttgatttcg caggcgaaat ccgcgcggcg
240
accagcttcc ccgtcttcca tgccgccaaa attcaggatg tcgccaccgc ccggcatgcg
300
attgccgcgc gcaaggtcga catgatcggc atgaccgcgc ccacatgac cgatccgcat
360
atcgctccga agatcatgga aaaacaggag gaggacatcc gcccctgcgt cggcgccaat
420
tattgtcttg atcgcattha tcaaggcggc ctgccttct gcattcacia tgccgcaacc
480
ggc
483

```

&lt;210&gt; 2020

&lt;211&gt; 161

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2020

```

Arg Val Gly Asp Asp Phe Ile Leu Gly Val Arg Tyr Thr Ala Asp Glu
1           5           10           15
Cys Leu Glu Asn Gly Thr Gly Lys Ala Glu Gly Ile Glu Ile Ser Arg
      20           25           30
Arg Leu Lys Glu Ser Gly Leu Ile Asp Tyr Leu Asn Val Ile Arg Gly

```



```

      35          40          45
His Ile Asp Thr Asp Pro Gly Leu Thr Asp Val Ile Pro Ile Gln Gly
  50          55          60
Met Ala Ser Ala Pro His Leu Asp Phe Ala Gly Glu Ile Arg Ala Ala
  65          70          75          80
Thr Ser Phe Pro Val Phe His Ala Ala Lys Ile Gln Asp Val Ala Thr
      85          90          95
Ala Arg His Ala Ile Ala Ala Gly Lys Val Asp Met Ile Gly Met Thr
      100          105          110
Arg Ala His Met Thr Asp Pro His Ile Val Arg Lys Ile Met Glu Lys
      115          120          125
Gln Glu Glu Asp Ile Arg Pro Cys Val Gly Ala Asn Tyr Cys Leu Asp
      130          135          140
Arg Ile Tyr Gln Gly Gly Leu Ala Phe Cys Ile His Asn Ala Ala Thr
      145          150          155          160
Gly

```

&lt;210&gt; 2021

&lt;211&gt; 797

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2021

```

ngaattcggg cactggctta actcggagca cagcttcacc acgacccatg acaagggaagg
  60
gtttctcctg agaagggcca gcaagtgtgt ttaaggacat cctccctcct gtccctgcag
  120
ccctcctccc tcagtactcg cgagactacg aaaacacgtg ctgaaatgga caccgcgtcc
  180
gggagccagt gttccgtcac ccagaagcc atactcaata atgaaaagct ggtcttgccg
  240
ccccgcattc ccagagtga cggctggtcg ttaccctgc actacttcca ggtggtgacc
  300
tggtgtgtct tcgtgggect ttctcggcc accttcggga tcttcattcc cttcctgcct
  360
cacgcgtgga aatacatcgc ctatgtggtg tccttttcat cgtggcatgg tctaagcggg
  420
aggggttctt ggaggacct gcgatggacc tggtgtggg gtctgggcca tggctgcccg
  480
gtggcaccag tcacctgtcc tgggccagac tatgtcccc gagcctgcag gtgggccag
  540
tggcccttta tggttttggc cagccccgt taagggtcag gccaggccag cgttggtga
  600
gggagttccg gagagggaat ctgtcaggag ggacagcagc cccctggcgt ggcgaggac
  660
ccgccctgct ggcagccttc cgctaaaatc cctgcgcagc attttgcaca tggccagccc
  720
ctttctcctt gcccttggtg ccaaggagga acagcgccat gccccgcagg tcggcagcct
  780
gcgtttccat gccaagc
  797

```

&lt;210&gt; 2022

<211> 135  
 <212> PRT  
 <213> Homo sapiens

<400> 2022  
 Met Asp Thr Arg Ser Gly Ser Gln Cys Ser Val Thr Pro Glu Ala Ile  
 1 5 10 15  
 Leu Asn Asn Glu Lys Leu Val Leu Pro Pro Arg Ile Ser Arg Val Asn  
 20 25 30  
 Gly Trp Ser Leu Pro Leu His Tyr Phe Gln Val Val Thr Trp Ala Val  
 35 40 45  
 Phe Val Gly Leu Ser Ser Ala Thr Phe Gly Ile Phe Ile Pro Phe Leu  
 50 55 60  
 Pro His Ala Trp Lys Tyr Ile Ala Tyr Val Val Ser Phe Ser Ser Trp  
 65 70 75 80  
 His Gly Leu Ser Gly Arg Gly Ser Trp Arg Thr Leu Arg Trp Thr Trp  
 85 90 95  
 Leu Trp Gly Leu Gly His Gly Cys Pro Val Ala Pro Val Thr Cys Pro  
 100 105 110  
 Gly Pro Asp Tyr Val Pro Arg Ala Cys Arg Trp Ala Gln Trp Pro Leu  
 115 120 125  
 Met Val Leu Ala Ser Pro Gly  
 130 135

<210> 2023  
 <211> 462  
 <212> DNA  
 <213> Homo sapiens

<400> 2023  
 naatctccga cgatccctgc cgacgtgctc gccggtgctc tcaagcaggc taaggaggct  
 60  
 cgcaccgcga tccttgaggt gatgaacgag gccatcgatt ctcccgatga aatggccccg  
 120  
 actgctccgc gcattcattac cgtccacatc ccagtggaca agatcggtga ggtcatcggc  
 180  
 cccaaggcca agatgattaa ccagattcag gacgacactg gcgccaatat ctctattgag  
 240  
 gacgatggca cgattttcat cggggctgat aacggagatt cggccgagtc tgcccgttcg  
 300  
 atgatcaacy cgatcgctaa cccacagatg cccgaggctg gtgagcgtaa cctcggcacc  
 360  
 gtcgtcaaga cgacgagctt tggcgctttc gtctctctgc tgcccggcaa ggatggctctg  
 420  
 ttgcacatct ccaagatgcg tgaccttaac gacggtaa ac gc  
 462

<210> 2024  
 <211> 154  
 <212> PRT  
 <213> Homo sapiens

<400> 2024  
 Xaa Ser Pro Thr Ile Pro Ala Asp Val Leu Ala Gly Ala Leu Lys Gln

```

      1           5           10           15
Ala Lys Glu Ala Arg Thr Ala Ile Leu Glu Val Met Asn Glu Ala Ile
      20           25           30
Asp Ser Pro Asp Glu Met Ala Pro Thr Ala Pro Arg Ile Ile Thr Val
      35           40           45
His Ile Pro Val Asp Lys Ile Gly Glu Val Ile Gly Pro Lys Gly Lys
      50           55           60
Met Ile Asn Gln Ile Gln Asp Asp Thr Gly Ala Asn Ile Ser Ile Glu
      65           70           75           80
Asp Asp Gly Thr Ile Phe Ile Gly Ala Asp Asn Gly Asp Ser Ala Glu
      85           90           95
Ser Ala Arg Ser Met Ile Asn Ala Ile Ala Asn Pro Gln Met Pro Glu
      100          105          110
Val Gly Glu Arg Tyr Leu Gly Thr Val Val Lys Thr Thr Ser Phe Gly
      115          120          125
Ala Phe Val Ser Leu Leu Pro Gly Lys Asp Gly Leu Leu His Ile Ser
      130          135          140
Lys Met Arg Asp Leu Asn Asp Gly Lys Arg
      145          150

```

&lt;210&gt; 2025

&lt;211&gt; 872

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2025

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cgtggtaacg atttacagga aagaacagct ggaactcgtg ctgggataac caggtacaag
60
tgctctctgc agagaataag tgcacacagg ttggtgtctt ctgaccgaga gccctcctga
120
agggagggtc gtacctcttc cctcatctca ttttacacaa ggcgacaggt cagaggccag
180
ggtgggacga gagcgaggga gcaactgtctc tggcagcagc acttgccact ccacaatgtg
240
gagaccagaa cggcacccca gagagcacgg gggaaatggc tcattcttaa aacaatggca
300
gaagaaatcc agccaaggtc acttttctctg tgtgagcatg ttaaggcca gagagtggct
360
acttctctgc ctctgcagc tccctcagtg tggcttggag gagttggcga agcttccaga
420
acacgctgga ggctgtcttc cgggtgttcc cactggggac cccagggtct gcacattcct
480
gcaccgcctc ctgtaactgc agctgaagct ggaaagagac cgcagagctc ttgagaggcg
540
cggaaaacca atggcgaaat attttgtcac agatgacctg caggttggtg tttacgcgct
600
gcgctccgca tttgttgact cgtaaatcac atcttgaaaa acagtcaaag aaattgcagt
660
cttcactctc tgtgcagttt tgctcaagga tttccctcat tttagggtca aaaaaggcca
720
tgtccacatc aatagccacc actgtgaagt cgctccggat ggcaaagttt tccggcttga
780
tgtcgcagag gtggaggcgg tgggtacagt ccctgtcgaa atggttcccc atgtccaaga
840

```

agctgagtg c gagggccctg atggccctgg cc  
872

<210> 2026  
<211> 157  
<212> PRT  
<213> Homo sapiens

<400> 2026  
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<210> 2028

<211> 114

<212> PRT

<213> Homo sapiens

<400> 2028

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<210> 2029

<211> 8028

<212> DNA

<213> Homo sapiens

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&lt;210&gt; 2030

&lt;211&gt; 794

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2030

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 His Ala Ser Gly Thr Gly Val Met Arg Ser Cys His Thr Ala Val Glu  
 530                      535                      540  
 Leu Phe Lys Asn Val Cys Glu Arg Gly Arg Trp Ser Glu Arg Leu Met  
 545                      550                      555                      560  
 Thr Ala Tyr Asn Ser Tyr Lys Asp Gly Asp Tyr Asn Ala Ala Val Ile  
 565                      570                      575  
 Gln Tyr Leu Leu Ala Glu Gln Gly Tyr Glu Val Ala Gln Ser Asn  
 580                      585                      590  
 Ala Ala Phe Ile Leu Asp Gln Arg Glu Ala Ser Ile Val Gly Glu Asn  
 595                      600                      605  
 Glu Thr Tyr Pro Arg Ala Leu Leu His Trp Asn Arg Ala Ala Ser Gln  
 610                      615                      620  
 Gly Tyr Thr Val Ala Arg Ile Lys Leu Gly Asp Tyr His Phe Tyr Gly  
 625                      630                      635                      640  
 Phe Gly Thr Asp Val Asp Tyr Glu Thr Ala Phe Ile His Tyr Arg Leu  
 645                      650                      655  
 Ala Ser Glu Gln Gln His Ser Ala Gln Ala Met Phe Asn Leu Gly Tyr  
 660                      665                      670  
 Met His Glu Lys Gly Leu Gly Ile Lys Gln Asp Ile His Leu Ala Lys  
 675                      680                      685  
 Arg Phe Tyr Asp Met Ala Ala Glu Ala Ser Pro Asp Ala Gln Val Pro  
 690                      695                      700  
 Val Phe Leu Ala Leu Cys Lys Leu Gly Val Val Tyr Phe Leu Gln Tyr  
 705                      710                      715                      720  
 Ile Arg Glu Thr Asn Ile Arg Asp Met Phe Thr Gln Leu Asp Met Asp  
 725                      730                      735  
 Gln Leu Leu Gly Pro Glu Trp Asp Leu Tyr Leu Met Thr Ile Ala  
 740                      745                      750  
 Leu Leu Leu Gly Thr Val Ile Ala Tyr Arg Gln Arg Gln His Gln Asp  
 755                      760                      765  
 Met Pro Ala Pro Arg Pro Pro Gly Pro Arg Pro Ala Pro Pro Gln Gln  
 770                      775                      780  
 Glu Gly Pro Pro Glu Gln Gln Pro Pro Gln  
 785                      790

&lt;210&gt; 2031

&lt;211&gt; 662

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2031

atcatcgaaa gcagcgcccg ccagcaggat tcgatttctc gccaaactgac ccagcagttc  
 60  
 atcagccaat ggcagcgccg tcacccggcg gatcagatca ccgtgcgtga cgtggcgctg  
 120  
 aaccccgctgc cgcacctgga cagcatctg ctggcggtt ggatgaaacc tgccgaacag  
 180  
 cgcagcgca tcgaacaggc ttccctggac cgctccaatc aattgaccga cgaattgctc  
 240  
 gccgcccagc tgctggtgat ggctgcaccg atgtacaact tcgctatccc cagcaccctc  
 300  
 aaagccctggc tggaccacgt gttgcgtgcc ggtgtgacct tcaagtacac cgccaccggc  
 360

cccagggat tgctgcacgg caagcgcgcg attgtgctga ccgctcgcgg cggcattcat  
 420  
 accggcgcca gctccgatca ccaggaaccg tacctgcgcc aggtcatggc ctttatcggg  
 480  
 attcatgacg tcacgttcat tcatgccgaa ggggtgaact tgagcgggtga cttccaggaa  
 540  
 aaaggcctta accacgccaa ggcgttgctg gcgcaacttg tggcatgaac cgagtcaacg  
 600  
 gttaatcgtc acataatcgc cgggtgttta tategcttca cgcaaaccct tcaagtacgc  
 660  
 gt  
 662

<210> 2032

<211> 195

<212> PRT

<213> Homo sapiens

<400> 2032

Ile	Ile	Glu	Ser	Ser	Ala	Arg	Gln	Gln	Asp	Ser	Ile	Ser	Arg	Gln	Leu
1				5					10					15	
Thr	Gln	Gln	Phe	Ile	Ser	Gln	Trp	Gln	Ala	Ala	His	Pro	Ala	Asp	Gln
			20					25					30		
Ile	Thr	Val	Arg	Asp	Val	Ala	Leu	Asn	Pro	Val	Pro	His	Leu	Asp	Thr
		35					40					45			
His	Leu	Leu	Gly	Gly	Trp	Met	Lys	Pro	Ala	Glu	Gln	Arg	Ser	Ala	Ile
	50					55				60					
Glu	Gln	Ala	Ser	Leu	Asp	Arg	Ser	Asn	Gln	Leu	Thr	Asp	Glu	Leu	Leu
65				70						75				80	
Ala	Ala	Asp	Val	Leu	Val	Met	Ala	Ala	Pro	Met	Tyr	Asn	Phe	Ala	Ile
			85						90					95	
Pro	Ser	Thr	Leu	Lys	Ala	Trp	Leu	Asp	His	Val	Leu	Arg	Ala	Gly	Val
			100					105					110		
Thr	Phe	Lys	Tyr	Thr	Ala	Thr	Gly	Pro	Gln	Gly	Leu	Leu	His	Gly	Lys
			115				120						125		
Arg	Ala	Ile	Val	Leu	Thr	Ala	Arg	Gly	Gly	Ile	His	Thr	Gly	Ala	Ser
		130				135						140			
Ser	Asp	His	Gln	Glu	Pro	Tyr	Leu	Arg	Gln	Val	Met	Ala	Phe	Ile	Gly
145					150					155				160	
Ile	His	Asp	Val	Thr	Phe	Ile	His	Ala	Glu	Gly	Val	Asn	Leu	Ser	Gly
			165						170				175		
Asp	Phe	Gln	Glu	Lys	Gly	Leu	Asn	His	Ala	Lys	Ala	Leu	Leu	Ala	Gln
			180					185					190		
Leu	Val	Ala													
			195												

<210> 2033

<211> 380

<212> DNA

<213> Homo sapiens

<400> 2033

aaattttaaa acggtcatca tttaacaggc gaagctgtaa aacgcagtct tgaagaggga  
 60

atgaaaaaaa gtgatttggt aaaaggatca cttcctatca aatcaatcaa cgctcatgga  
 120  
 caaaaagtca caatcaatac taaagaacct tatccagaat taaagtctga actcgcaagc  
 180  
 ccatttctgt ctatatacga cacaaaagct aaaaacaaag taactgatca acctgttggt  
 240  
 acgggtcctt atcaaattga cagttataaa cgttcgcaaa aaatcgtatt aaaacaattc  
 300  
 aaagactact ggcaaggtag gccaaaatta aaaagaatta atgtcactta tcatgaagat  
 360  
 ggtaatantc gtgttgatca  
 380

<210> 2034

<211> 106

<212> PRT

<213> Homo sapiens

<400> 2034

Met	Lys	Lys	Ser	Asp	Leu	Leu	Lys	Gly	Ser	Leu	Pro	Ile	Lys	Ser	Ile
1					5					10				15	
Asn	Ala	His	Gly	Gln	Lys	Val	Thr	Ile	Asn	Thr	Lys	Glu	Pro	Tyr	Pro
			20					25				30			
Glu	Leu	Lys	Ser	Glu	Leu	Ala	Ser	Pro	Phe	Ala	Ala	Ile	Tyr	Asp	Thr
	35					40				45					
Lys	Ala	Lys	Asn	Lys	Val	Thr	Asp	Gln	Pro	Val	Gly	Thr	Gly	Pro	Tyr
	50				55				60						
Gln	Ile	Asp	Ser	Tyr	Lys	Arg	Ser	Gln	Lys	Ile	Val	Leu	Lys	Gln	Phe
65				70				75						80	
Lys	Asp	Tyr	Trp	Gln	Gly	Thr	Pro	Lys	Leu	Lys	Arg	Ile	Asn	Val	Thr
			85					90						95	
Tyr	His	Glu	Asp	Gly	Asn	Xaa	Arg	Val	Asp						
			100					105							

<210> 2035

<211> 495

<212> DNA

<213> Homo sapiens

<400> 2035

ngaattcctt tactgcttgc aacacaggcc caagctactc gcagccatga tacttcctgt  
 60  
 cttcacttct ttcattgatg tatgtatgta tgtatgtatg tatgtatgta tgtatgtatg  
 120  
 tatgctntaa tgttccccct tcatctcgca tgtctccact tctgctgcta ttgctgttac  
 180  
 ttgtgtgttg gtgcacctaa tgggtgtccca tatttctctg atgctgtgtt catttttctt  
 240  
 gattctttct actgtctggt cttcagtttg cataatccat attgttctct ctactagtcc  
 300  
 actggtgctt ttgcttgcca gctctaattt actgttatcc ccttttagtga aattttttct  
 360  
 ttttttctct tctcattcca gttattatac agaactattc aacttcaaga tttgtggggc  
 420

tttgttttgt tttgttttga gaccccatct caaaaaaaaa aaaaaccagc tttctcctca  
 480  
 acttggggga acctt  
 495

<210> 2036  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 2036  
 Xaa Ile Pro Leu Leu Leu Ala Thr Gln Ala Gln Ala Thr Arg Ser His  
 1 5 10 15  
 Asp Thr Ser Cys Leu His Phe Phe His Val Cys Met Tyr Val Cys Met  
 20 25 30  
 Tyr Val Cys Met Tyr Val Cys Met Tyr Ala Xaa Met Phe Pro Phe His  
 35 40 45  
 Leu Ala Cys Leu His Phe Cys Cys Tyr Cys Cys Tyr Leu Cys Val Gly  
 50 55 60  
 Ala Pro Asn Gly Val Pro Tyr Phe Ser Asp Ala Val Phe Ile Phe Leu  
 65 70 75 80  
 Asp Ser Phe Tyr Cys Leu Val Phe Ser Leu His Asn Pro Tyr Cys Ser  
 85 90 95  
 Leu Tyr

<210> 2037  
 <211> 327  
 <212> DNA  
 <213> Homo sapiens

<400> 2037  
 acgcgtgaag ggaaggggga gaccccgga gaaatggaga aatgggggcg cacacagacg  
 60  
 ggaagagtga gggtggagtg cctttcccg cgtcatcttc cgtcccccact ccacgccag  
 120  
 caaatccaaa caccgcggcc tctggtggcc cgggcttcca tttcccctgg aggggcaagg  
 180  
 gcgtttcctc ttccgcccga ccggggcgct gagcggcggg aacagcggcg ggggctttgt  
 240  
 ggtcccgggg gggtccgagtg tgtgtcaggg gctggggcgg gggatgggcg cggcccctgg  
 300  
 gtatccctca cggtcctggg tcatgag  
 327

<210> 2038  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 2038  
 Met Glu Lys Trp Gly Arg Thr Gln Thr Gly Arg Val Arg Leu Glu Cys  
 1 5 10 15  
 Leu Ser Arg Ala His Leu Pro Ser Pro Leu His Ala Gln Gln Ile Gln

```

      20      25      30
Thr Pro Arg Pro Leu Val Ala Arg Ala Ser Ile Ser Pro Gly Gly Ala
      35      40      45
Arg Ala Phe Pro Leu Pro Pro Asn Arg Gly Ala Glu Arg Arg Glu Gln
      50      55      60
Arg Arg Gly Leu Cys Gly Pro Gly Gly Ser Glu Cys Val Ser Gly Ala
      65      70      75      80
Gly Ala Gly Asp Gly Arg Gly Pro Trp Val Ser Leu Thr Val Leu Val
      85      90      95
His Glu

```

&lt;210&gt; 2039

&lt;211&gt; 307

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2039

```

accggtgac cactctgcga aagcggccgc gagcgaagcg ttcttgggtct tcttcgagat
60
cgcgatgtat tgcccggaaa acagcggcctt gatgccgtca ttgagaggct ctgggccaac
120
accggtacgg gcatatgcct gggcggcatt cttttggatg ttgcgaagaa aggacgcatt
180
cgcggtgccg aaagccaggg atccttcacc gtagaccttg gaccgatgga ggcccccggc
240
aatcgagtcc ttcgaaattc ccccttggca tacatgtcgg ccacgtcgtg cagccagagt
300
aacgcgt
307

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&lt;210&gt; 2040

&lt;211&gt; 94

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2040

```

Met Ala Asp Met Tyr Ala Lys Gly Glu Phe Arg Arg Thr Arg Leu Pro
  1      5      10      15
Gly Ala Ser Ile Gly Pro Arg Ser Thr Val Lys Asp Pro Trp Leu Ser
      20      25      30
Ala Arg Arg Met Arg Pro Phe Phe Ala Thr Ser Lys Arg Met Pro Pro
      35      40      45
Arg His Met Pro Val Pro Val Leu Ala Gln Ser Leu Ser Met Thr Ala
      50      55      60
Ser Ser Arg Cys Phe Pro Gly Asn Thr Ser Arg Ser Arg Arg Arg Pro
      65      70      75      80
Arg Thr Leu Arg Ser Arg Pro Leu Ser Gln Ser Gly Ser Pro
      85      90

```

&lt;210&gt; 2041

&lt;211&gt; 348

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens



<400> 2041  
 nnccggcgat gcagggatc gcccgcgatg cgctcgaacc cggcgcgggg ggcgttcctc  
 60  
 gccagcttcc tgccgttcgc cagacgcacg gccgaggcgg gggatgcgaa ttcgctcgcc  
 120  
 cagctggctg ccaagctgac cctgcccggc atgcccagaca tctaccaggg ctgcgagatg  
 180  
 tgggacctca gcctggtcga ccggggacaat cgccgccccg tcgactacga gacacgcgac  
 240  
 gcggccctgg ccggctgggt cgcgaccccc ccggaggaac gcgcccgggc gctgcgcacc  
 300  
 ctgctgacgg attggcgag cggcgcggtc aagctggccg tgacgcgt  
 348

<210> 2042  
 <211> 116  
 <212> PRT  
 <213> Homo sapiens

<400> 2042  
 Xaa Arg Arg Cys Arg Asp Ser Pro Ala Met Arg Ser Asn Pro Ala Arg  
 1 5 10 15  
 Gly Ala Phe Leu Ala Ser Phe Leu Pro Phe Ala Arg Arg Ile Ala Glu  
 20 25 30  
 Ala Gly Val Arg Asn Ser Leu Ala Gln Leu Val Ala Lys Leu Thr Leu  
 35 40 45  
 Pro Gly Met Pro Asp Ile Tyr Gln Gly Cys Glu Met Trp Asp Leu Ser  
 50 55 60  
 Leu Val Asp Arg Asp Asn Arg Arg Pro Val Asp Tyr Glu Thr Arg Asp  
 65 70 75 80  
 Ala Ala Leu Ala Gly Trp Val Ala Thr Pro Glu Glu Arg Ala Ala  
 85 90 95  
 Ala Leu Arg Thr Leu Leu Thr Asp Trp Arg Ser Gly Ala Val Lys Leu  
 100 105 110  
 Ala Val Thr Arg  
 115

<210> 2043  
 <211> 712  
 <212> DNA  
 <213> Homo sapiens

<400> 2043  
 gatctgacgg tctcgactaa gcctgaccat tccgaggtca ccgacgccga ccttgccgtc  
 60  
 gaagattcgg tgcgcagagc cctgtctcga atgcgctccc gggatgccgt ccacggcgag  
 120  
 gaacgtgccg ataccgggga tggacccccg cggtggatca ttgatccgat cgacggcact  
 180  
 gcgaattttc tgcgtggggg ccagtggtgg gccaccctca ttgccctcag cgtcgaggac  
 240  
 cagattgtcg catctgtggt ctctgtcct gccctcaagc gacgctgggt ggcagcccgt  
 300

ggctcaggag catggtcggg caaatccctg gcctcagcga caccgatcca cgtctcgaat  
 360  
 gtgcgcaatc ttgccgacgc attcttgtcc tactcttcgc tgcacggatg ggctcgagagc  
 420  
 ggacgagggc acgggttcgg tgaactcatg cggtcggtgt ggcggaccgc agccttcggc  
 480  
 gatttctggt cttacatgat ggtggcagaa ggtgtcgtcg atgtggcatg cgagccggaa  
 540  
 ctcagcctgc acgacatggc cgccctcgac gctatcgtca ccgaggcggg cggtaagttc  
 600  
 accggtctcg atggcaaaga cggcccgtag tctgggaatg ctctggcgtc gaatgggttc  
 660  
 cttcatgacc aggccttagc catggtccag cctcaggagt gagcaccgat cg  
 712

<210> 2044

<211> 233

<212> PRT

<213> Homo sapiens

<400> 2044

Asp	Leu	Thr	Val	Ser	Thr	Lys	Pro	Asp	His	Ser	Glu	Val	Thr	Asp	Ala
1				5				10						15	
Asp	Leu	Ala	Val	Glu	Asp	Ser	Val	Arg	Ala	Leu	Ser	Arg	Met	Arg	
			20					25					30		
Ser	Arg	Asp	Ala	Val	His	Gly	Glu	Glu	Arg	Ala	Asp	Thr	Gly	Asp	Gly
			35				40					45			
Pro	Arg	Arg	Trp	Ile	Ile	Asp	Pro	Ile	Asp	Gly	Thr	Ala	Asn	Phe	Leu
			50			55					60				
Arg	Gly	Val	Pro	Val	Trp	Ala	Thr	Leu	Ile	Ala	Leu	Ser	Val	Glu	Asp
65					70					75				80	
Gln	Ile	Val	Ala	Ser	Val	Val	Ser	Ala	Pro	Ala	Leu	Lys	Arg	Arg	Trp
			85					90						95	
Trp	Ala	Ala	Arg	Gly	Ser	Gly	Ala	Trp	Ser	Gly	Lys	Ser	Leu	Ala	Ser
			100				105						110		
Ala	Thr	Pro	Ile	His	Val	Ser	Asn	Val	Arg	Asn	Leu	Ala	Asp	Ala	Phe
			115				120					125			
Leu	Ser	Tyr	Ser	Ser	Leu	His	Gly	Trp	Val	Glu	Ser	Gly	Arg	Gly	His
			130			135					140				
Gly	Phe	Gly	Glu	Leu	Met	Arg	Ser	Val	Trp	Arg	Thr	Arg	Ala	Phe	Gly
145					150					155				160	
Asp	Phe	Trp	Ser	Tyr	Met	Met	Val	Ala	Glu	Gly	Val	Val	Asp	Val	Ala
			165					170					175		
Cys	Glu	Pro	Glu	Leu	Ser	Leu	His	Asp	Met	Ala	Ala	Leu	Asp	Ala	Ile
			180					185					190		
Val	Thr	Glu	Ala	Gly	Gly	Lys	Phe	Thr	Gly	Leu	Asp	Gly	Lys	Asp	Gly
			195				200					205			
Pro	Trp	Ser	Gly	Asn	Ala	Leu	Ala	Ser	Asn	Gly	Phe	Leu	His	Asp	Gln
			210			215					220				
Ala	Leu	Ala	Met	Val	Gln	Pro	Gln	Glu							
225					230										

<210> 2045

<211> 406

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2045

nnttggacac cggcgactat gccgccaccg cacggatcaa tcgcggaccc agggcagggg  
 60  
 atgcgccgga tgggcgacgg tgatggaccg ggcgctggac ctgggagggtc gcttcgacga  
 120  
 cantacaggc tttggccgag gcgggttgga agaaaccggt caaccggtgg tttggccccg  
 180  
 catcaatgcc cagaaccaga agccttgccg attcgtccca ggcggttcaa ggccgatggc  
 240  
 gagatcgctg cgatgactgg cgacggtgtc aacgacgcc cctcgctcaa ggcgggcccat  
 300  
 atcgggtgtc ccatggacaa acgcggcacc gacgtcgcgc gcgaggcttc cgccatggtc  
 360  
 ctgctcgagg atgattttgg atcgatcgtg cagtcgggtcc ggctcgc  
 406

&lt;210&gt; 2046

&lt;211&gt; 135

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2046

Xaa	Trp	Thr	Pro	Ala	Thr	Met	Pro	Pro	Pro	His	Gly	Ser	Ile	Ala	Asp
1				5					10					15	
Pro	Gly	Gln	Gly	Met	Arg	Arg	Met	Gly	Asp	Gly	Asp	Gly	Pro	Gly	Ala
		20						25					30		
Gly	Pro	Gly	Arg	Ser	Leu	Arg	Arg	Xaa	Tyr	Arg	Leu	Trp	Pro	Arg	Arg
		35					40					45			
Val	Gly	Arg	Asn	Arg	Ser	Thr	Gly	Gly	Leu	Ala	Pro	His	Gln	Cys	Pro
	50				55						60				
Glu	Pro	Glu	Ala	Leu	Arg	Ile	Arg	Pro	Arg	Pro	Phe	Lys	Ala	Asp	Gly
65					70					75				80	
Glu	Ile	Val	Ala	Met	Thr	Gly	Asp	Gly	Val	Asn	Asp	Ala	Pro	Ser	Leu
			85						90					95	
Lys	Ala	Ala	His	Ile	Gly	Val	Ala	Met	Asp	Lys	Arg	Gly	Thr	Asp	Val
			100					105						110	
Ala	Arg	Glu	Ala	Ser	Ala	Met	Val	Leu	Leu	Glu	Asp	Asp	Phe	Gly	Ser
		115					120					125			
Ile	Val	Gln	Ser	Val	Arg	Leu									
		130				135									

&lt;210&gt; 2047

&lt;211&gt; 796

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2047

aagcttttga acgagacccc tgagctctgg gttcagcccc gaggaagccc agcaacagga  
 60  
 tgaggaattt gagaagaaga ttccaagtgt ggaagacagc cttggagagg gcagcaggga  
 120

tgctggccgg ccaggagaga gaggatccgg gggcttggtc agtcctagca ctgcccacgt  
 180  
 gccggatggg gcactcgggc agagagacca gagcagctgg caaaacagtg atgctagcca  
 240  
 ggaggtggga gggcatcagg agagacagca ggcaggggct cagggccctg gcagtgtga  
 300  
 cctggaagat ggggagatgg gaaagcgagg ctgggtcggg gagtttagcc tcagtgttgg  
 360  
 ccccagcga gaggcagcat ttagcccagg gcagcaggac tggagccggg acttctgcat  
 420  
 cgaggccagt gagaggagct atcagtttgg catcattggc aacgacagag tgagtgttgc  
 480  
 ttgcttttagc ctttctagca agatggaagg tggtcacttt gtgcctcctg ggaagaccac  
 540  
 agctggctcg gtggactgga ctgaccagct gggctctcagg aacttggaag tgtccagctg  
 600  
 tgtgggttct gggggctcga gcgaggccag ggagagtgcc gtgggacaga tgggctggtc  
 660  
 aggtggcctg agcttgagag acatgaacct gaccggctgt ttggaaagtg gagggcttga  
 720  
 agagccgggg ggaatcggaa ttggggagaa ggactggact tctgatgtta atgtgaagag  
 780  
 caaagatttg gctgag  
 796

<210> 2048  
 <211> 160  
 <212> PRT  
 <213> Homo sapiens

<400> 2048  
 Met Gly Lys Arg Gly Trp Val Gly Glu Phe Ser Leu Ser Val Gly Pro  
 1 5 10 15  
 Gln Arg Glu Ala Ala Phe Ser Pro Gly Gln Gln Asp Trp Ser Arg Asp  
 20 25 30  
 Phe Cys Ile Glu Ala Ser Glu Arg Ser Tyr Gln Phe Gly Ile Ile Gly  
 35 40 45  
 Asn Asp Arg Val Ser Gly Ala Gly Phe Ser Pro Ser Ser Lys Met Glu  
 50 55 60  
 Gly Gly His Phe Val Pro Pro Gly Lys Thr Thr Ala Gly Ser Val Asp  
 65 70 75 80  
 Trp Thr Asp Gln Leu Gly Leu Arg Asn Leu Glu Val Ser Ser Cys Val  
 85 90 95  
 Gly Ser Gly Gly Ser Ser Glu Ala Arg Glu Ser Ala Val Gly Gln Met  
 100 105 110  
 Gly Trp Ser Gly Gly Leu Ser Leu Arg Asp Met Asn Leu Thr Gly Cys  
 115 120 125  
 Leu Glu Ser Gly Gly Ser Glu Glu Pro Gly Gly Ile Gly Ile Gly Glu  
 130 135 140  
 Lys Asp Trp Thr Ser Asp Val Asn Val Lys Ser Lys Asp Leu Ala Glu  
 145 150 155 160

<210> 2049  
 <211> 516

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2049

cgcgctcgctt acggtgcgct gaataccagc ctgctggcgc tggcgggtcag cttcgcgctcg  
 60  
 ctgttcctcg ggatagtgtt cgggctgatg ccacgtctga tgtgcggggg gattgaactg  
 120  
 gccaacgctc ccccgccaat cgccctgggc ctgttagtag tcgccattag cggcccttca  
 180  
 gcctacgggtg ccgcctgtgc ggtgatgttg gtcagttggg ctccgctggc cgccattgt  
 240  
 gcttcgttgt tggcggaagc ccgcacgcag ccctatatcc gcatgttgcc ggtattgggc  
 300  
 gtcggccgat ggcgacgct gaccactac ctgctgccgg cgctctctgc tcccctgctg  
 360  
 cgccacgcca tggtgctgtc gccgggcatt gcgctggcgc tggcggcctt gggttttttt  
 420  
 ggtcttgggc cgcagccacc cagtgcagaa tgggggctgg tgctggcgga aggcattgct  
 480  
 tatctcgaac gggcgccctg gggagtcttg gcaccg  
 516

&lt;210&gt; 2050

&lt;211&gt; 172

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2050

Arg	Val	Ala	Tyr	Gly	Ala	Leu	Asn	Thr	Ser	Leu	Leu	Ala	Leu	Ala	Val
1				5					10					15	
Ser	Phe	Ala	Ser	Leu	Phe	Leu	Gly	Ile	Val	Phe	Gly	Leu	Met	Pro	Arg
			20					25					30		
Leu	Met	Cys	Gly	Val	Ile	Glu	Leu	Ala	Asn	Ala	Pro	Pro	Pro	Ile	Ala
		35					40					45			
Leu	Gly	Leu	Leu	Val	Val	Ala	Ile	Ser	Gly	Pro	Ser	Ala	Tyr	Gly	Ala
	50					55				60					
Ala	Cys	Ala	Val	Met	Leu	Val	Ser	Trp	Ala	Pro	Leu	Ala	Ala	His	Cys
65					70					75				80	
Ala	Ser	Leu	Leu	Ala	Glu	Ala	Arg	Thr	Gln	Pro	Tyr	Ile	Arg	Met	Leu
			85					90						95	
Pro	Val	Leu	Gly	Val	Gly	Arg	Trp	Arg	Thr	Leu	Thr	His	Tyr	Leu	Leu
		100						105					110		
Pro	Ala	Leu	Ser	Ala	Pro	Leu	Leu	Arg	His	Ala	Met	Leu	Arg	Leu	Pro
		115				120				125					
Gly	Ile	Ala	Leu	Ala	Leu	Ala	Ala	Leu	Gly	Phe	Phe	Gly	Leu	Gly	Pro
	130					135				140					
Gln	Pro	Pro	Ser	Ala	Glu	Trp	Gly	Leu	Val	Leu	Ala	Glu	Gly	Met	Pro
145					150					155				160	
Tyr	Leu	Glu	Arg	Ala	Pro	Trp	Gly	Val	Leu	Ala	Pro				
			165					170							

&lt;210&gt; 2051

&lt;211&gt; 411

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2051

gagcaaaact atcggttctac cggcaatatt ctgaaaagtg ccaaccaact tatttcgaat  
 60  
 aatagtgatc gtctcggtaa gaatttatgg accgacggtg aaatggggga gccagtaggt  
 120  
 atttatgcag catttaatga attagatgag gcaaaatttg tggcgtctca aatccaaaat  
 180  
 tgggtagatg atggtgggga attagatgat tgtgctgttt tatatcgtag taatagccaa  
 240  
 tctcgtgtta ttgaagaagc cttgattcgt tgccaaattc cttatcgaat ttatggcggg  
 300  
 atgcgattct tcgaacgcca agaaattaaa gatgcgttgg catattttacg ttttaattaat  
 360  
 aatcgtcaag atgatgccgc atttgagcgt gtgattaata cgcctacgcg t  
 411

&lt;210&gt; 2052

&lt;211&gt; 137

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2052

Glu	Gln	Asn	Tyr	Arg	Ser	Thr	Gly	Asn	Ile	Leu	Lys	Ser	Ala	Asn	Gln
1				5						10				15	
Leu	Ile	Ser	Asn	Asn	Ser	Asp	Arg	Leu	Gly	Lys	Asn	Leu	Trp	Thr	Asp
		20					25					30			
Gly	Glu	Met	Gly	Glu	Pro	Val	Gly	Ile	Tyr	Ala	Ala	Phe	Asn	Glu	Leu
	35					40					45				
Asp	Glu	Ala	Lys	Phe	Val	Ala	Ser	Gln	Ile	Gln	Asn	Trp	Val	Asp	Asp
	50				55					60					
Gly	Gly	Glu	Leu	Asp	Asp	Cys	Ala	Val	Leu	Tyr	Arg	Ser	Asn	Ser	Gln
65				70						75				80	
Ser	Arg	Val	Ile	Glu	Glu	Ala	Leu	Ile	Arg	Cys	Gln	Ile	Pro	Tyr	Arg
		85						90					95		
Ile	Tyr	Gly	Gly	Met	Arg	Phe	Phe	Glu	Arg	Gln	Glu	Ile	Lys	Asp	Ala
	100						105						110		
Leu	Ala	Tyr	Leu	Arg	Leu	Ile	Asn	Asn	Arg	Gln	Asp	Asp	Ala	Ala	Phe
	115					120					125				
Glu	Arg	Val	Ile	Asn	Thr	Pro	Thr	Arg							
	130					135									

&lt;210&gt; 2053

&lt;211&gt; 287

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2053

nccatggaag ccttcaatct tgtaagagaa agtgaacagc tgttttccat atgccaaatc  
 60  
 ccgctcctct gctggatcct gtgtaccagt ctgaagcaag agatgcagaa aggaaaagac  
 120

ctggccctga cctgccagag cactacctct gtgtactcct ctttcgtctt taacctgttc  
 180  
 acacctgagg gtgccgaggg cccgactccg caaaccacgc accagctgaa ggccctgtgc  
 240  
 tcctggctg cagagggtat gtggacagac acatttgagt tttgtga  
 287

<210> 2054  
 <211> 79  
 <212> PRT  
 <213> Homo sapiens

<400> 2054  
 Ile Cys Gln Ile Pro Leu Leu Cys Trp Ile Leu Cys Thr Ser Leu Lys  
 1 5 10 15  
 Gln Glu Met Gln Lys Gly Lys Asp Leu Ala Leu Thr Cys Gln Ser Thr  
 20 25 30  
 Thr Ser Val Tyr Ser Ser Phe Val Phe Asn Leu Phe Thr Pro Glu Gly  
 35 40 45  
 Ala Glu Gly Pro Thr Pro Gln Thr Gln His Gln Leu Lys Ala Leu Cys  
 50 55 60  
 Ser Leu Ala Ala Glu Gly Met Trp Thr Asp Thr Phe Glu Phe Cys  
 65 70 75

<210> 2055  
 <211> 298  
 <212> DNA  
 <213> Homo sapiens

<400> 2055  
 nnacgcgttg ttatgaacaa tgacggtgtc ctctaccccg atacctgcgt ggggtactgat  
 60  
 tcccacacca ccatggaaaa tggctctggc attctgggct ggggcgtcgg tggattgaa  
 120  
 gccgaggctg ctatgcttgg ccagcccatc tccatgctta tcccccggtg tgttggcttt  
 180  
 aaacttactg gccaaacaca gccgggtgtc accgctacag atgttgttct taccattact  
 240  
 gatatgcttc gccagcatgg tgtgggtgga aaattcgggg aattctatgg gggaagcg  
 298

<210> 2056  
 <211> 99  
 <212> PRT  
 <213> Homo sapiens

<400> 2056  
 Xaa Arg Val Val Met Asn Asn Asp Gly Val Leu Tyr Pro Asp Thr Cys  
 1 5 10 15  
 Val Gly Thr Asp Ser His Thr Thr Met Glu Asn Gly Leu Gly Ile Leu  
 20 25 30  
 Gly Trp Gly Val Gly Gly Ile Glu Ala Glu Ala Ala Met Leu Gly Gln  
 35 40 45  
 Pro Ile Ser Met Leu Ile Pro Arg Val Val Gly Phe Lys Leu Thr Gly

50                      55                      60  
 Gln Thr Gln Pro Gly Val Thr Ala Thr Asp Val Val Leu Thr Ile Thr  
 65                      70                      75                      80  
 Asp Met Leu Arg Gln His Gly Val Gly Gly Lys Phe Gly Glu Phe Tyr  
                     85                      90                      95  
 Gly Gly Ser

<210> 2057  
 <211> 569  
 <212> DNA  
 <213> Homo sapiens

<400> 2057  
 acgcgtcccg acagtaccga ctataacgga ggaaactatc aggaacggta taaaatttta  
 60  
 gcagaaatc gtaaggctct tgaagacgga gatcgccaaa aagccaaacg attagctgaa  
 120  
 caaaatctag ttggacaaaa caacgcccag tatggtcggt atctagcctt tggatgatc  
 180  
 ttcatggtct tcaataacca gaaaaagggg ctggatacag ttacagacta tcaccgtggt  
 240  
 ttggatatca cagaagccac tactacaact tcttacaccc aagatggaac gacctttaa  
 300  
 agagaaacct tctcaagtta ccctgatgat gttactgtta ctacttgac ccaaaaagg  
 360  
 gacaaaaaac ttgatatttac agtttggaaat agcttaacag aagatttact tgctaacgga  
 420  
 gactactcag cggaatatc taactacaag agtggccatg ttacgacaga ccaaatggt  
 480  
 atcctactaa aaggtagcagt caaagataat ggcctccagt tcgcaccta tctaggaatt  
 540  
 aaaacggacg gaaaagttac tgttcatga  
 569

<210> 2058  
 <211> 128  
 <212> PRT  
 <213> Homo sapiens

<400> 2058  
 Met Val Phe Asn Asn Gln Lys Lys Gly Leu Asp Thr Val Thr Asp Tyr  
 1                      5                      10                      15  
 His Arg Gly Leu Asp Ile Thr Glu Ala Thr Thr Thr Ser Tyr Thr  
                     20                      25                      30  
 Gln Asp Gly Thr Thr Phe Lys Arg Glu Thr Phe Ser Ser Tyr Pro Asp  
                     35                      40                      45  
 Asp Val Thr Val Thr His Leu Thr Gln Lys Gly Asp Lys Lys Leu Asp  
                     50                      55                      60  
 Phe Thr Val Trp Asn Ser Leu Thr Glu Asp Leu Leu Ala Asn Gly Asp  
 65                      70                      75                      80  
 Tyr Ser Ala Glu Tyr Ser Asn Tyr Lys Ser Gly His Val Thr Thr Asp  
                     85                      90                      95  
 Pro Asn Gly Ile Leu Leu Lys Gly Thr Val Lys Asp Asn Gly Leu Gln



100. 105 110  
 Phe Ala Ser Tyr Leu Gly Ile Lys Thr Asp Gly Lys Val Thr Val His  
 115 120 125  
 <210> 2059  
 <211> 644  
 <212> DNA  
 <213> Homo sapiens  
 <400> 2059  
 gaattcgtgc caccgtgcc atacttcgcc acgcaacaga gtgccgtcag cggattgggc  
 60  
 agcaatcgac ctgtaggact cagccatgat cgactgggca tcctcgtata gtcgcgatgc  
 120  
 cgcaaccgcc tgcgcttcca agcctgcagc gacgtaagag gccctctcac aactgaacc  
 180  
 gatcgtccta gacaacgtgg aagcgataac ctgcgctcgc ttctgctgat tctgggcca  
 240  
 gctcgacaag aagaaccgca gagggcgac ggcctgttca gggagcgac cttcagcgtt  
 300  
 cgtcttggtc tccgggacag caaaaagcgg ggaatcagcc aggccacgct ccgtcatgag  
 360  
 tcggcggagg tccgccggtta cctctctcat ggcttcaca ggaacgcggt cacacaccac  
 420  
 cgcgatcgac gcgtgcctct cttgagcctc gttgaggaaa tcccacggca cagcgtcagc  
 480  
 gtagcgggct gctgagggtga caaagatcca cagatccgag gctggagca actgagccgc  
 540  
 cagatcacga ttgcgggtca ccacagagtc gatgtccggg gcatcgagga tggccaaacc  
 600  
 tcgcggaatc cttgactccg cgacgagctg caaactcgac gcgt  
 644  
 <210> 2060  
 <211> 130  
 <212> PRT  
 <213> Homo sapiens  
 <400> 2060  
 Met Arg Glu Val Pro Ala Asp Leu Gly Arg Leu Met Thr Glu Arg Gly  
 1 5 10 15  
 Leu Ala Asp Ser Pro Leu Phe Ala Val Pro Glu Thr Lys Thr Asn Ala  
 20 25 30  
 Glu Gly Ala Leu Pro Asp Gln Ala Val Ala Pro Leu Arg Phe Phe Leu  
 35 40 45  
 Ser Ser Leu Ala Gln Asn Gln Gln Lys Arg Arg Glu Val Ile Ala Ser  
 50 55 60  
 Thr Leu Ser Gly Ala Ile Gly Ser Val Cys Glu Arg Ala Ser Tyr Val  
 65 70 75 80  
 Ala Ala Gly Leu Glu Ala Gln Ala Val Ala Ala Ser Arg Leu Tyr Glu  
 85 90 95  
 Asp Ala Gln Ser Ile Met Ala Glu Ser Tyr Arg Ser Ile Ala Ala Gln  
 100 105 110  
 Ser Ala Asp Gly Thr Leu Leu Arg Gly Glu Val Leu Ala Arg Trp His

115 120 125

Glu Phe  
130

<210> 2061  
<211> 481  
<212> DNA  
<213> Homo sapiens

<400> 2061  
gttaacctgg taaggagagc gacacaggaa ggtgcagggg ttgccatggt gtggccccag  
60  
atgctgtgat tacgcgccag ccccgtcaca ccgtacgggt ggtaggactg ggcaaagaag  
120  
acgccgccac ctggatgcac tgaggtgtgc acagccacgt ggagatgatg ctgggggctc  
180  
acggtgactc tcaggaggcc ctggcctggc ctatctggag ccttctctgt gaaatgaggc  
240  
tggtaacgcc cactagcagg gttgtagggg acatggatct gtggccacct cctcaagggt  
300  
tgccacacgc accaggtcct gactgggagt ccggcccccga gggcctgtgg atggctggcc  
360  
tgggccacgc ctccgcccc aaggggtgctg gcacctggca tgtgcccac agttggggcc  
420  
ggctggtggg aaggtgtgtg tcaggtggcg gagcctcggg gccaggatct cactcacgcg  
480  
t  
481

<210> 2062  
<211> 133  
<212> PRT  
<213> Homo sapiens

<400> 2062  
Met Pro Gly Ala Ser Thr Leu Gly Gly Gly Trp Ala Gln Ala Ser  
1 5 10 15  
His Pro Gln Ala Leu Gly Ala Gly Leu Pro Val Arg Thr Trp Cys Val  
20 25 30  
Trp Gln Pro Leu Arg Arg Trp Pro Gln Ile His Val Pro Tyr Asn Pro  
35 40 45  
Ala Ser Gly Arg Tyr Gln Pro His Phe Thr Glu Lys Ala Pro Asp Arg  
50 55 60  
Pro Gly Gln Gly Leu Leu Arg Val Thr Val Ser Pro Gln His His Leu  
65 70 75 80  
His Val Ala Val His Thr Ser Val His Pro Gly Gly Gly Val Phe Phe  
85 90 95  
Ala Gln Ser Tyr His Pro Tyr Gly Val Thr Gly Leu Ala Arg Asn His  
100 105 110  
Ser Ile Trp Gly His Thr Met Ala Thr Pro Ala Pro Ser Cys Val Ala  
115 120 125  
Leu Leu Thr Arg Leu  
130

<210> 2063  
 <211> 419  
 <212> DNA  
 <213> Homo sapiens

<400> 2063  
 gccggcgccg tcgagcgcggt gcctttcaat atcgaggccc aagacatggt gctgctcatc  
 60  
 gcggacacca atgccccgca catgctttcc gacggccaat acgcctcccg ccggggcatc  
 120  
 atcgagcgccg tccaatctgc cgccgggttc tccatccgcy agatctcgaa tgcggtggac  
 180  
 ttggccgcca ccgtcaatcc cgccgaggcg gaactctatc gccgcgcggt gcaccacgtg  
 240  
 gtggaagaaa ccaaccggac cctagatgcc gctaccgcyg tggcatcttc cgatctagat  
 300  
 acattccggc ggcttatgcy cgagagccac atctccctgc ggcacctta tgaggtcacc  
 360  
 actccggagc tcgactccgt ttttaccgcy gccggcgagc tgggcgctcg catgannnn  
 419

<210> 2064  
 <211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 2064  
 Ala Gly Ala Val Glu Arg Val Pro Phe Asn Ile Glu Ala Gln Asp Met  
 1 5 10 15  
 Val Leu Leu Ile Ala Asp Thr Asn Ala Pro His Met Leu Ser Asp Gly  
 20 25 30  
 Gln Tyr Ala Ser Arg Arg Gly Ile Ile Asp Ala Val Gln Ser Ala Ala  
 35 40 45  
 Gly Cys Ser Ile Arg Glu Ile Ser Asn Ala Val Asp Phe Ala Ala Thr  
 50 55 60  
 Val Asn Pro Ala Glu Ala Glu Leu Tyr Arg Arg Val His His Val  
 65 70 75 80  
 Val Glu Glu Thr Asn Arg Thr Leu Asp Ala Ala Thr Ala Leu Ala Ser  
 85 90 95  
 Ser Asp Leu Asp Thr Phe Arg Arg Leu Met Arg Glu Ser His Ile Ser  
 100 105 110  
 Leu Arg Asp Leu Tyr Glu Val Thr Thr Pro Glu Leu Asp Ser Val Phe  
 115 120 125  
 Thr Ala Ala Gly Glu Leu Gly Ala Arg Met Xaa  
 130 135

<210> 2065  
 <211> 598  
 <212> DNA  
 <213> Homo sapiens

<400> 2065  
 gccggcgcta tggcctctct gctcgccgac gccgccgatg cccttcccgg cgcaaagggtg  
 60

cgcgcgaccg ttactggatc ggcgggattg ggaaccgcag aggcattggg ccttactttc  
 120  
 attcaggagg tcatagctga gacggccgcc gtccaacgtt ggaatcccga cgccgacgtg  
 180  
 cttctcgaac tcgggtggtga ggatgccaag atcacctacc ttaagccggt ccccgaacag  
 240  
 cgcatgaatg gttcgtgtgc tgggtggcacc ggtgccttca tcgaccagat ggctaccctg  
 300  
 ctgcacaccg acactcccgg cctcaatgac ctgcgcatccc gagccaagac catccatccg  
 360  
 atcgccctgc gctgtggtgt ttttgccaag tccgaccttc agcccctcat taacgagggg  
 420  
 gcccgccacg aggatctggc tgccctcggtc ctgcaggctg tcgccactca gtgcattgcc  
 480  
 ggccctggcat gtggtcgccc gattcgaggt aagggtcatct tccttggcgg tccgcttcac  
 540  
 tttatgccaa gtttgcgaga cgctttctcg cgcgctcctcg acggtaaggt tgacgcgt  
 598

<210> 2066

<211> 199

<212> PRT

<213> Homo sapiens

<400> 2066

Ala Gly Ala Met Ala Ser Leu Leu Ala Asp Ala Ala Asp Ala Leu Pro  
 1 5 10 15  
 Gly Ala Lys Val Arg Ala Thr Val Thr Gly Ser Ala Gly Leu Gly Thr  
 20 25 30  
 Ala Glu Ala Leu Gly Leu Thr Phe Ile Gln Glu Val Ile Ala Glu Thr  
 35 40 45  
 Ala Ala Val Gln Arg Trp Asn Pro Asp Ala Asp Val Leu Leu Glu Leu  
 50 55 60  
 Gly Gly Glu Asp Ala Lys Ile Thr Tyr Leu Lys Pro Val Pro Glu Gln  
 65 70 75 80  
 Arg Met Asn Gly Ser Cys Ala Gly Gly Thr Gly Ala Phe Ile Asp Gln  
 85 90 95  
 Met Ala Thr Leu Leu His Thr Asp Thr Pro Gly Leu Asn Asp Leu Ala  
 100 105 110  
 Ser Arg Ala Lys Thr Ile His Pro Ile Ala Ser Arg Cys Gly Val Phe  
 115 120 125  
 Ala Lys Ser Asp Leu Gln Pro Leu Ile Asn Glu Gly Ala Arg His Glu  
 130 135 140  
 Asp Leu Ala Ala Ser Val Leu Gln Ala Val Ala Thr Gln Cys Ile Ala  
 145 150 155 160  
 Gly Leu Ala Cys Gly Arg Pro Ile Arg Gly Lys Val Ile Phe Leu Gly  
 165 170 175  
 Gly Pro Leu His Phe Met Pro Ser Leu Arg Asp Ala Phe Ser Arg Val  
 180 185 190  
 Leu Asp Gly Lys Val Asp Ala  
 195

<210> 2067

<211> 366

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2067

ttccagcaga tgctgcaaac ctggaccgc agcggcacgc tgcaggaggc cgtggccaac  
 60  
 aagatcgccg aatggctgga tgccgacctg caacagtggg acatttcccg cgatgcaccg  
 120  
 tacttcgggt tcgagatccc gggcgagcca ggcaagtatt tctacgtgtg gctggacgag  
 180  
 ccgatcggct acatggccag tttcaagaac ctgtgcgacc gcacgccgga gctggacttc  
 240  
 gatgctttct ggccaagga ctccaccgcc gagctgtacc atttcatcgg caaggacatc  
 300  
 gtcaacttcc acgccctgtt ctggccggcg atgctcgaag gctcgggcta ccgtaaaccg  
 360  
 accggt  
 366

&lt;210&gt; 2068

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2068

Phe	Gln	Gln	Met	Leu	Gln	Thr	Trp	Thr	Arg	Ser	Gly	Thr	Leu	Gln	Glu
1				5				10					15		
Ala	Val	Ala	Asn	Lys	Ile	Ala	Glu	Trp	Leu	Asp	Ala	Asp	Leu	Gln	Gln
			20					25					30		
Trp	Asp	Ile	Ser	Arg	Asp	Ala	Pro	Tyr	Phe	Gly	Phe	Glu	Ile	Pro	Gly
		35				40					45				
Glu	Pro	Gly	Lys	Tyr	Phe	Tyr	Val	Trp	Leu	Asp	Ala	Pro	Ile	Gly	Tyr
	50				55					60					
Met	Ala	Ser	Phe	Lys	Asn	Leu	Cys	Asp	Arg	Thr	Pro	Glu	Leu	Asp	Phe
65				70				75					80		
Asp	Ala	Phe	Trp	Ala	Lys	Asp	Ser	Thr	Ala	Glu	Leu	Tyr	His	Phe	Ile
			85					90					95		
Gly	Lys	Asp	Ile	Val	Asn	Phe	His	Ala	Leu	Phe	Trp	Pro	Ala	Met	Leu
		100				105							110		
Glu	Gly	Ser	Gly	Tyr	Arg	Lys	Pro	Thr	Gly						
		115				120									

&lt;210&gt; 2069

&lt;211&gt; 280

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2069

cctagagagg atggtggaga ctgtgcgtgt gcagggtgtt ccggaacctt ccctgggatg  
 60  
 catggggcct cgccgcaggc catctctcca gacctgggct caccctgccc ctgtgctgtt  
 120  
 gcctttgggt ggaattccac ccagccttc ttgcctcaag aacgcccttc ccccttcaga  
 180

tctcatgggc acagggcccg tcttcctaaa cggggtcaga gccccagta atcatgacaa  
 240  
 agaccctctc ctcgatcaag ctttggtcaa gctcctaccc  
 280

<210> 2070  
 <211> 90  
 <212> PRT  
 <213> Homo sapiens

<400> 2070  
 Met Val Glu Thr Val Arg Val Gln Gly Val Pro Glu Pro Ser Leu Gly  
 1 5 10 15  
 Cys Met Gly Pro Arg Arg Arg Pro Ser Leu Gln Thr Trp Ala His Pro  
 20 25 30  
 Ala Pro Val Leu Leu Pro Leu Ala Gly Ile Pro Pro Gln Pro Ser Cys  
 35 40 45  
 Leu Lys Asn Ala Leu Pro Pro Ser Asp Leu Met Gly Thr Gly Pro Val  
 50 55 60  
 Phe Leu Asn Gly Val Arg Ala Pro Ser Asn His Asp Lys Asp Pro Leu  
 65 70 75 80  
 Leu Asp Gln Ala Leu Val Lys Leu Leu Pro  
 85 90

<210> 2071  
 <211> 399  
 <212> DNA  
 <213> Homo sapiens

<400> 2071  
 acgcggtgcc agcagactta gaaagcaggt tcctcttgtc atacagcacg ttaacatagc  
 60  
 tgacgaggcc tgggtgtctt catcagtact gtgatgactc tttcaccttt gacttcagat  
 120  
 gctggcgctt tttacttttt gtgccaaact ctacacatga aacacttttg gaataactac  
 180  
 agacatgact ttctttatct ggggaaaagg agggcattaa accagattag gggctgggag  
 240  
 gggagggtgt caggggatga gctgctcctg aggaagagggc agagatcaag cttcactcag  
 300  
 cagctggatt ctacacctagt ttatagactg aaatcctgca aggtgggttac aacagtgaac  
 360  
 aatatgttca tacataaaga ctctaccctc aggtgatca  
 399

<210> 2072  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 2072  
 Met Thr Leu Ser Pro Leu Thr Ser Asp Ala Gly Ala Phe Tyr Phe Leu  
 1 5 10 15  
 Cys Gln Thr Leu His Met Lys His Phe Trp Asn Asn Tyr Arg His Asp

```

          20          25          30
Phe Leu Tyr Leu Gly Lys Arg Arg Ala Leu Asn Gln Ile Arg Gly Trp
          35          40          45
Glu Gly Arg Leu Ser Gly Asp Glu Leu Leu Leu Arg Lys Arg Gln Arg
          50          55          60
Ser Ser Phe Thr Gln Gln Leu Asp Ser His Leu Val Tyr Arg Leu Lys
65          70          75          80
Ser Cys Lys Val Val Thr Thr Val Asn Asn Met Phe Ile His Lys Asp
          85          90          95
Ser Thr Leu Arg
          100

```

<210> 2073  
 <211> 339  
 <212> DNA  
 <213> Homo sapiens

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<400> 2073
ggatccactt ctgtgccttt ccagcttcta gaggctgcct gcgttccttg gctcgtggcc
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ccttctccca ccttcaagcc agcagcggag gcctgagtcc ttctcatgcc atctctctgt
120
tctctctcct gcctcctcct ccacactgaa ggacccctgt gatcacactg gccccccac
180
cggatgaccc aggataatcc atctccctgt ttgaaggtcg gctgattagc aaccttcatt
240
ccatctgcct ccttcatgcc ccctggccat gtaatgggat tcacagcttc tggggattag
300
gacatggaca tcttgtggcg ggggcataat tctgtcgac
339

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<210> 2074  
 <211> 85  
 <212> PRT  
 <213> Homo sapiens

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<400> 2074
Met Lys Glu Ala Asp Gly Met Lys Val Ala Asn Gln Pro Thr Phe Lys
1          5          10          15
Gln Gly Asp Gly Leu Ser Trp Val Ile Arg Trp Gly Gly Gln Cys Asp
          20          25          30
His Arg Gly Pro Ser Val Trp Arg Arg Arg Gln Glu Arg Glu Gln Arg
          35          40          45
Asp Gly Met Arg Arg Thr Gln Ala Ser Ala Ala Gly Leu Lys Val Glu
          50          55          60
Glu Gly Ala Thr Ser Gln Gly Thr Gln Ala Ala Ser Arg Ser Trp Lys
65          70          75          80
Gly Thr Glu Val Asp
          85

```

<210> 2075  
 <211> 481  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 2075

ntggccaggt tgacctcaaa ggtgtacatt gttttatgtg gcgacaatgg actgtcagaa  
60  
accaaggagc tctcctgtcc agagaagtcc ctgtttgaaa ggaattccag acacaccttt  
120  
atcctgagcg ctctcgccca actgggcttg ctgaggaaga tccgcctctg gcacgacagc  
180  
cgtgggcctt cccaggtg gttcatcagc cacgtgatgg tgaaggagct gcacacggga  
240  
cagggctggt tcttccctgc ccagtgttg ctgtctgccg gcaggcatga tggtcgctg  
300  
gagcgggagc tcacctgtct gcaaggggga ctgggttctt ggaagctttt ctattgcaag  
360  
ttcacagagt acctggagga tttccatgtc tggtgtcgg tgtacagcag gccctcctcc  
420  
agcgcctacc tgcacagcc gcgcccacc gtgtccttct cctgtgtgtg cgtctacgcg  
480  
t  
481

&lt;210&gt; 2076

&lt;211&gt; 160

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2076

Xaa	Ala	Arg	Leu	Thr	Ser	Lys	Val	Tyr	Ile	Val	Leu	Cys	Gly	Asp	Asn
1				5					10					15	
Gly	Leu	Ser	Glu	Thr	Lys	Glu	Leu	Ser	Cys	Pro	Glu	Lys	Ser	Leu	Phe
			20					25					30		
Glu	Arg	Asn	Ser	Arg	His	Thr	Phe	Ile	Leu	Ser	Ala	Pro	Ala	Gln	Leu
		35					40					45			
Gly	Leu	Leu	Arg	Lys	Ile	Arg	Leu	Trp	His	Asp	Ser	Arg	Gly	Pro	Ser
	50					55				60					
Pro	Gly	Trp	Phe	Ile	Ser	His	Val	Met	Val	Lys	Glu	Leu	His	Thr	Gly
65					70					75				80	
Gln	Gly	Trp	Phe	Phe	Pro	Ala	Gln	Cys	Trp	Leu	Ser	Ala	Gly	Arg	His
			85					90						95	
Asp	Gly	Arg	Val	Glu	Arg	Glu	Leu	Thr	Cys	Leu	Gln	Gly	Gly	Leu	Gly
			100					105					110		
Phe	Trp	Lys	Leu	Phe	Tyr	Cys	Lys	Phe	Thr	Glu	Tyr	Leu	Glu	Asp	Phe
		115					120					125			
His	Val	Trp	Leu	Ser	Val	Tyr	Ser	Arg	Pro	Ser	Ser	Ser	Arg	Tyr	Leu
		130				135						140			
His	Thr	Pro	Arg	Pro	Thr	Val	Ser	Phe	Ser	Leu	Leu	Cys	Val	Tyr	Ala
145					150					155					160

&lt;210&gt; 2077

&lt;211&gt; 1410

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2077



ncagagtgtt ttgagctatc tggatatcca aatgatgtga atactttcag aaaccaatgg  
60  
caaattgaac ccaactgttt gcgaattcgg caccagtaaa gatctttttt tttttttgt  
120  
ttttttttt ttttttttt ttttgcttcc taaagtggct ttaatatcac acaagcggct  
180  
ctttggtcta cagttagaga aaacagaggg agccaggaaa ggctccccgc tggcctctgg  
240  
agtccaggag ccttaggaag gctgaaacaa gccctgacca gcaggcttag ttgtcctgag  
300  
aagagccagt gaggccacct ggtccagttc accaggtttc ccagggaagc acaggcatct  
360  
ctgggtcccc gagcacagt cagggaaga caccceaat ccccatctga acaggccgag  
420  
ggcagcatgg gaaaggctca gactgcaggt tcatcccgca ggatggtaag gacacgtgct  
480  
cctccctcgc aagagcaggc ttgtgcacag cccggcacag ggccagccag ggcggcccct  
540  
gcggctgtgc agcgcttacc agggggagga gttcagccat caggaccttt tccaagtggg  
600  
tctgtggctc cagcacagcc actcgcagct tgagggccgc cagggtctgc agctcctggg  
660  
tgctggagta gacaagcagc tgggnnggct ccatgcaggc tccgctctac cccacagga  
720  
cggcgaggct ccggggggcc tnnccccaca gacatggtct tggtggtgt tccgccaccg  
780  
ctgcacgcag ctctgcagc ctgtgcagac actggcccac catggcctgc agccctcca  
840  
gcgtgagcag gcagcggtag tcctgcatcc agtccatggg ggcgtgctgag agctcctccc  
900  
tcatgcgcag tctcagcagc gagcaggcct tccgcaggcg cccgcctcc gcctccacct  
960  
ccacagcact gagcctgggc tggggccccgc ctgaagctgt ctgcatgttc tggaggaact  
1020  
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1080  
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1140  
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1200  
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1260  
ccccactga cagcagccgg cgctcagggt ggcccttggc aggcaccgtg gtctggcgga  
1320  
ggcccttggg gggctctctg tctgaagcat ggccaccagc ttggcctggg gaatgcgggtg  
1380  
gggcggaggc tgtcgtgcca gaagaggtga  
1410

&lt;210&gt; 2078

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2078

Gly His Leu Val Gln Phe Thr Arg Phe Pro Arg Glu Ala Gln Ala Ser  
 1 5 10 15  
 Leu Gly Pro Arg Ala Gln Cys Gln Gly Arg His Pro Gln Ser Pro Ser  
 20 25 30  
 Glu Gln Ala Glu Gly Ser Met Gly Lys Ala Gln Thr Ala Gly Ser Ser  
 35 40 45  
 Arg Arg Met Val Arg Thr Arg Ala Pro Pro Ser Gln Glu Gln Ala Cys  
 50 55 60  
 Ala Gln Pro Gly Thr Gly Pro Ala Arg Ala Ala Pro Ala Ala Val Gln  
 65 70 75 80  
 Arg Leu Pro Gly Gly Val Gln Pro Ser Gly Pro Phe Pro Ser Gly  
 85 90 95  
 Ser Ala Gly Pro Ala Gln Pro Leu Ala Ala  
 100 105

&lt;210&gt; 2079

&lt;211&gt; 565

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2079

atttacctcg caaccgaccc tgatcgtgaa ggtgaaagca tcagctggca catccagcag  
 60  
 gtactggcgg tcaaatccta caaacgcatt accttcaacg agatcactct caagcgcgtt  
 120  
 gaagaggcac tggccaatcc tcgacaaatc gatctgaaca gaggttgcctc acaggaatgc  
 180  
 cggcgtgtgc ttgaccgctt ggtggggtac ctggtgaccc aagagttgcg gcgcctgatg  
 240  
 ggcaaaccta cttccgctgg ccgcgttcaa tcacccgcgg tgtttcttgt ggtcttgcg  
 300  
 gaacgcgaga tccgcaactt tcagggtgac aatcactttg gcgtgcgtct gttctttgcc  
 360  
 gatgtaagtc ggggcaccac ttggtatgcc gaggggcaac cggtagcgga ttccgcaagc  
 420  
 aagcacttcc cctatgttca ggatagcaac ctggctcagc acgtcgccgg cactcgaaat  
 480  
 gtggctgtgg agtcctgcga ggatcgcaag gccgagcgtc atcctcctgc accattcatc  
 540  
 tcatccactc ttcaacaggc cgcca  
 565

&lt;210&gt; 2080

&lt;211&gt; 188

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2080

Ile Tyr Leu Ala Thr Asp Pro Asp Arg Glu Gly Glu Ser Ile Ser Trp  
 1 5 10 15  
 His Ile Gln Gln Val Leu Ala Val Lys Ser Tyr Lys Arg Ile Thr Phe  
 20 25 30  
 Asn Glu Ile Thr Leu Lys Arg Val Glu Glu Ala Leu Ala Asn Pro Arg

```

      35          40          45
Gln Ile Asp Leu Asn Arg Val Ala Ser Gln Glu Cys Arg Arg Val Leu
  50          55          60
Asp Arg Leu Val Gly Tyr Leu Val Thr Gln Glu Leu Arg Arg Leu Met
  65          70          75          80
Gly Lys Pro Thr Ser Ala Gly Arg Val Gln Ser Pro Ala Val Phe Leu
      85          90          95
Val Val Leu Arg Glu Arg Glu Ile Arg Asn Phe Gln Val Ile Asn His
      100          105          110
Phe Gly Val Arg Leu Phe Phe Ala Asp Val Ser Arg Gly Thr Thr Trp
      115          120          125
Tyr Ala Glu Trp Gln Pro Val Pro Asp Phe Ala Ser Lys His Phe Pro
      130          135          140
Tyr Val Gln Asp Ser Asn Leu Ala Gln His Val Ala Gly Thr Arg Asn
      145          150          155          160
Val Val Val Glu Ser Cys Glu Asp Arg Lys Ala Glu Arg His Pro Pro
      165          170          175
Ala Pro Phe Ile Ser Ser Thr Leu Gln Gln Ala Ala
      180          185

```

&lt;210&gt; 2081

&lt;211&gt; 319

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2081

```

aagcttatgg aaaaacgggg atacggagag gagtatataa atcgctataa aatgatgaca
60
agggttccatc atcaacgggt tccactagta attttggtgt gtggaactgc ctgtactgga
120
aaatcaacaa tcgctacaca acttgctcag aggctcaatt tgcctaattgt tttgcagacg
180
gacatggtgt atgagctgct gcggacatca acagatgcgc cacttacttc agttcctgtg
240
tgggctcgcg attttaattc acctgaagag cttatcactg aattctgcag agaatgcaga
300
gttgtagcga agggtttgg
319

```

&lt;210&gt; 2082

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2082

```

Lys Leu Met Glu Lys Arg Gly Tyr Gly Glu Glu Tyr Ile Asn Arg Tyr
  1          5          10          15
Lys Met Met Thr Arg Phe His His Gln Arg Val Pro Leu Val Ile Leu
      20          25          30
Val Cys Gly Thr Ala Cys Thr Gly Lys Ser Thr Ile Ala Thr Gln Leu
      35          40          45
Ala Gln Arg Leu Asn Leu Pro Asn Val Leu Gln Thr Asp Met Val Tyr
      50          55          60
Glu Leu Leu Arg Thr Ser Thr Asp Ala Pro Leu Thr Ser Val Pro Val

```

```

65          70          75          80
Trp Ala Arg Asp Phe Asn Ser Pro Glu Glu Leu Ile Thr Glu Phe Cys
          85          90          95
Arg Glu Cys Arg Val Val Arg Lys Gly Leu
          100          105

```

<210> 2083  
 <211> 382  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2083
nngcctgatt gcgacatggc cgtcgagtgc gctgtaacac gcaagcagct atataccatc
60
atacctactg ttgaatgcaa ctgtggccac gttttctgct ttggctgtgg ttgggatgga
120
caccagccgg tcatttgtgc tgtgtgccgc ttgtggctga aaaaatgtgc ggatgacagt
180
gagacgtcca actggatcgg cgctaatacc aaggaatgcc ccaaagtctg ttcgacgatt
240
gaaaagaatg gcggatgtaa tcatatgacg tgtcgcaagt gcaaatacga attttgttgg
300
atttgctcgg gcccatggtc ggagcacgga aacaactatt acaactgcaa tcggtacgat
360
gaaaaggcag gagatgaagg tn
382

```

<210> 2084  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2084
Xaa Pro Asp Cys Asp Met Ala Val Glu Cys Ala Val Thr Arg Lys Gln
1      5      10      15
Leu Tyr Thr Ile Ile Pro Thr Val Glu Cys Asn Cys Gly His Val Phe
20     25     30
Cys Phe Gly Cys Gly Leu Asp Gly His Gln Pro Val Ile Cys Ala Val
35     40     45
Val Arg Leu Trp Leu Lys Lys Cys Ala Asp Asp Ser Glu Thr Ser Asn
50     55     60
Trp Ile Gly Ala Asn Thr Lys Glu Cys Pro Lys Cys Cys Ser Thr Ile
65     70     75     80
Glu Lys Asn Gly Gly Cys Asn His Met Thr Cys Arg Lys Cys Lys Tyr
85     90     95
Glu Phe Cys Trp Ile Cys Ser Gly Pro Trp Ser Glu His Gly Asn Asn
100    105    110
Tyr Tyr Asn Cys Asn Arg Tyr Asp Glu Lys Ala Gly Asp Glu Gly
115    120    125

```

<210> 2085  
 <211> 478  
 <212> DNA  
 <213> Homo sapiens

<400> 2085  
 nnggatccca aagaccgcga tattgccatg gtgttccaaa actatgccct ctacccgcac  
 60  
 atgactgtcg ccgacaacat gggttttgcc ctcaaactgg cgaaagtgga taagaaagaa  
 120  
 atccggcgtc gcgtggagga agccgccgaa ctctcgacc tcaccgacta tctggaccgc  
 180  
 aaaccaagg cactctccgg tggccagcgg cagcgcgtcg ccatggggcg cgtattgtt  
 240  
 cgttcccccc gcgtcttctt gatggacgag cctctttcta acctggatgc gcgtctgcgt  
 300  
 gtccgcaccc gcgcccagat tgcggaactg cagcgccgcc tgggcaccac caccgtttat  
 360  
 gtcacccatg accaggtgga ggctatgacg atgggggatc gtgtggctgt tctctgtgcc  
 420  
 gggaaactgc agcaggtgga tactccacgt aatcttttcg accaccccg ctaacgcgt  
 478

<210> 2086  
 <211> 159  
 <212> PRT  
 <213> Homo sapiens

<400> 2086  
 Xaa Asp Pro Lys Asp Arg Asp Ile Ala Met Val Phe Gln Asn Tyr Ala  
 1 5 10 15  
 Leu Tyr Pro His Met Thr Val Ala Asp Asn Met Gly Phe Ala Leu Lys  
 20 25 30  
 Leu Ala Lys Val Asp Lys Lys Glu Ile Arg Arg Arg Val Glu Glu Ala  
 35 40 45  
 Ala Glu Leu Leu Asp Leu Thr Asp Tyr Leu Asp Arg Lys Pro Lys Ala  
 50 55 60  
 Leu Ser Gly Gly Gln Arg Gln Arg Val Ala Met Gly Arg Ala Ile Val  
 65 70 75 80  
 Arg Ser Pro Arg Val Phe Leu Met Asp Glu Pro Leu Ser Asn Leu Asp  
 85 90 95  
 Ala Arg Leu Arg Val Arg Thr Arg Ala Gln Ile Ala Glu Leu Gln Arg  
 100 105 110  
 Arg Leu Gly Thr Thr Thr Val Tyr Val Thr His Asp Gln Val Glu Ala  
 115 120 125  
 Met Thr Met Gly Asp Arg Val Ala Val Leu Cys Ala Gly Lys Leu Gln  
 130 135 140  
 Gln Val Asp Thr Pro Arg Asn Leu Phe Asp His Pro Ala Asn Ala  
 145 150 155

<210> 2087  
 <211> 731  
 <212> DNA  
 <213> Homo sapiens

<400> 2087  
 gataattctc tacacggcat gagctgggga cgtacccccc ttgccaacgt cacctcacgg  
 60

tcgtaccgtg gtgattagca gctagccgag gcgctagccg ccatataaga ttcccaaatt  
 120  
 aaaagaaaaa gcattgcgtc ggccaagaat tgctgtcgtc gctgcaacgg ctactgcgtc  
 180  
 ggtcggatca atcgcagcaa tcacccctc cccaggcag aagctaactc caataggcca  
 240  
 cgctcggtag ctcaagccgc tatcgccacg gatggaaagg ggataatcaa caaggactgc  
 300  
 cgtgatgcag tcatcaacga tgcaaagctg cgtgccgga ttgccggtgc gttggttaag  
 360  
 gctggattta gttccgccga cgcggtggct ctagcgccgc gtattgccag agaaatggca  
 420  
 aaagaggggc tcctctcat caaccaccac aagctaaagg ctctcatcgg agcccagggtg  
 480  
 ggtctgctca ctgatgcgaa gatccagcgt gctgccgctg cagtggacct cggcatcaaa  
 540  
 gccactctag ctgcgacaat cattcccaac gcgctgcatt cagcggcatt caaggatgcg  
 600  
 gtggtcgcaa atcttgtcgc cgcgggtctg acaagaagtt ggcaaaggct acggctgtcg  
 660  
 ccattgccgc aactgcgtc aatcccgctc tcgggccgat cgcaaagact gaggccatta  
 720  
 aggctgagat c  
 731

<210> 2088  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 2088  
 Met Ala Lys Glu Gly Val Leu Leu Ile Asn His His Lys Leu Lys Ala  
 1 5 10 15  
 Leu Ile Gly Ala Gln Val Gly Leu Leu Thr Asp Ala Lys Ile Gln Arg  
 20 25 30  
 Ala Ala Ala Ala Val Asp Leu Gly Ile Lys Ala Thr Leu Ala Ala Thr  
 35 40 45  
 Ile Ile Pro Asn Ala Leu His Ser Ala Ala Phe Lys Asp Ala Val Val  
 50 55 60  
 Ala Asn Leu Val Ala Ala Gly Leu Thr Arg Ser Trp Gln Arg Leu Arg  
 65 70 75 80  
 Leu Ser Pro Leu Pro Gln Leu Arg Ser Ile Pro Leu Ser Gly Arg Ser  
 85 90 95  
 Gln Arg Leu Arg Pro Leu Arg Leu Arg  
 100 105

<210> 2089  
 <211> 315  
 <212> DNA  
 <213> Homo sapiens

<400> 2089  
 accggtgtgg accaggctca gctgcgcgac gccatgtttt cctaccttcc ccaccacaag  
 60

ctcggggaat tcgacatcga tctgttgctg gaccatcgcg attcccgtca gcccatcatc  
 120  
 ttcgacacccg accacttcga ggggtacgag cgcccccgcc tcgtgctgca cgaagtcacc  
 180  
 gatcaacttg gccaaagcgtt cctgtatttg gaaggcccag agccggctct cggctgggaa  
 240  
 tcgttggtgg cgtctctcac gagtcttgtc gactctatgg ggatccgtct gaccggcatt  
 300  
 accgattcga tcccg  
 315

<210> 2090

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2090

Thr	Gly	Val	Asp	Gln	Ala	Gln	Leu	Arg	Asp	Ala	Met	Phe	Ser	Tyr	Leu
1				5					10					15	
Pro	His	His	Lys	Leu	Gly	Glu	Phe	Asp	Ile	Asp	Leu	Leu	Leu	Asp	His
			20					25					30		
Arg	Asp	Ser	Arg	Gln	Pro	Ile	Ile	Phe	Asp	Thr	Asp	His	Phe	Glu	Gly
		35				40					45				
Tyr	Glu	Arg	Pro	Arg	Leu	Val	Leu	His	Glu	Val	Thr	Asp	Gln	Leu	Gly
	50				55					60					
Gln	Ala	Phe	Leu	Val	Leu	Glu	Gly	Pro	Glu	Pro	Ala	Leu	Gly	Trp	Glu
65				70					75					80	
Ser	Leu	Val	Ala	Ser	Leu	Thr	Ser	Leu	Val	Asp	Ser	Met	Gly	Ile	Arg
			85					90						95	
Leu	Thr	Gly	Ile	Thr	Asp	Ser	Ile	Pro							
			100					105							

<210> 2091

<211> 322

<212> DNA

<213> Homo sapiens

<400> 2091

actcttggtcc attgtctctg tctctcggtt tttctctctg tctctctgtg tctctgtctc  
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 tgtgtccctg tccagttctg tnnctgtgtg tgcgcgcac tctctctgtg tctctgtng  
 120  
 agtctctgtc tcttttgtct ctgtctctct ctgtgtctct gccattttg gtctctgctt  
 180  
 tctttctctc gtgtgtctct ccatttctgt ctctcttctc ctgtctctct ccatttctgt  
 240  
 ctctgtctct tttctctctg tgtgtctctt ttgtctctct gttctctctg gtgtctctgt  
 300  
 ccatttctgt cccttcacgc gt  
 322

<210> 2092

<211> 107

<212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2092

```

Thr Leu Val His Cys Leu Cys Leu Cys Val Phe Leu Ser Val Ser Leu
 1           5           10           15
Cys Leu Cys Leu Cys Val Pro Val Gln Phe Cys Xaa Cys Val Cys Ala
      20           25           30
His Leu Ser Leu Cys Leu Cys Xaa Ser Leu Cys Leu Phe Cys Leu Cys
      35           40           45
Leu Ser Leu Cys Leu Cys Pro Phe Trp Ser Leu Leu Ser Phe Leu Cys
      50           55           60
Val Ser Leu His Phe Cys Leu Ser Ser Ser Val Ser Leu His Phe Cys
65           70           75           80
Leu Cys Ser Phe Ser Leu Cys Val Ser Leu Leu Ser Leu Cys Phe Ser
      85           90           95
Ala Cys Leu Cys Pro Phe Leu Ser Leu His Ala
      100           105

```

&lt;210&gt; 2093

&lt;211&gt; 324

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2093

```

gccggcggtca tgcaaacgat caaggtggcg caatttcgcc tctgccatag tcgaaaaatg
60
tttgtggtgg cctaccgcg agagaccag gagatgggtgc tcgatgcgca taaccgcgcc
120
tttgcgttct ttggcggcgt accgcagcgg gttatctacg acaaccttaa aaccgcagtg
180
gatgcgatct tggtcggcaa ggatcgaatc ttcaaccggc gcttctctggc gttggetaat
240
cattacctgt ttgaacctgt agcctgtacg cctgctgctg gctgggagaa gggccaagtt
300
gagaatcaag ttgcgaacat acgc
324

```

&lt;210&gt; 2094

&lt;211&gt; 108

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2094

```

Ala Gly Val Met Gln Thr Ile Lys Val Ala Gln Phe Arg Leu Cys His
 1           5           10           15
Ser Arg Lys Met Phe Val Val Ala Tyr Pro Arg Glu Thr Gln Glu Met
      20           25           30
Val Leu Asp Ala His Asn Arg Ala Phe Ala Phe Phe Gly Gly Val Pro
      35           40           45
Gln Arg Val Ile Tyr Asp Asn Leu Lys Thr Ala Val Asp Ala Ile Leu
      50           55           60
Val Gly Lys Asp Arg Ile Phe Asn Arg Arg Phe Leu Ala Leu Ala Asn
65           70           75           80
His Tyr Leu Phe Glu Pro Val Ala Cys Thr Pro Ala Ala Gly Trp Glu

```



85 90 95  
 Lys Gly Gln Val Glu Asn Gln Val Arg Asn Ile Arg  
 100 105  
 <210> 2095  
 <211> 402  
 <212> DNA  
 <213> Homo sapiens  
 <400> 2095  
 cccgtcacag accaggaaga agcagacaat atgatcgctt ctttcgacac ttatgttcgc  
 60  
 accctgcccc ccgccgccaa tcttctgctt aaacaattcc atattgtgga tgttgcccgg  
 120  
 cgcgtagtggtg gcgtgggttc agtgggcacc cactccctgg tactgtctact gtccggcccc  
 180  
 aatgatgaac ctcttgtgct gcaagtgaag gaagccctcc ccagtgtcct caccacccat  
 240  
 gggaaactgc cggatgcttt ttcggaactg tccgctgggg actcctccgg gctcctcccc  
 300  
 gataatcttg ataagcatat taaagccggc aatggctacc gggtagtggtg gtgccagcag  
 360  
 attctgcagg cccactcgga tccgctgctg gggtaggacgc gt  
 402

<210> 2096  
 <211> 134  
 <212> PRT  
 <213> Homo sapiens

<400> 2096  
 Pro Val Thr Asp Gln Glu Glu Ala Asp Asn Met Ile Ala Ser Phe Asp  
 1 5 10 15  
 Thr Tyr Val Arg Thr Leu Pro Pro Ala Ala Asn Leu Leu Leu Lys Gln  
 20 25 30  
 Phe His Ile Val Asp Val Ala Arg Arg Val Val Gly Val Gly Ser Val  
 35 40 45  
 Gly Thr His Ser Leu Val Leu Leu Leu Ser Gly Pro Asn Asp Glu Pro  
 50 55 60  
 Leu Val Leu Gln Val Lys Glu Ala Leu Pro Ser Val Leu Thr Thr His  
 65 70 75 80  
 Gly Lys Leu Pro Asp Ala Phe Ser Glu Leu Ser Ala Gly Asp Ser Ser  
 85 90 95  
 Gly Leu Leu Pro Asp Asn Leu Asp Lys His Ile Lys Ala Gly Asn Gly  
 100 105 110  
 Tyr Arg Val Val Ala Cys Gln Gln Ile Leu Gln Ala His Ser Asp Pro  
 115 120 125  
 Leu Leu Gly Trp Thr Arg  
 130

<210> 2097  
 <211> 641  
 <212> DNA  
 <213> Homo sapiens

<400> 2097  
 negttttctca cccgccctcc agcctcatca gcagctgtgg gctcaggccc cctccccgag  
 60  
 gcggagcagg cgtggccgca gacgacggg gaggaggagc tgcagctcca gctggccctg  
 120  
 gccatgagca aggaggagge cgaccaggta ctgggcgtgc agctgggggt gtctgtccgc  
 180  
 caccgcctc cagcctcac ttcaggctcc ctcccagcca ggcgtgggccc tggccctcac  
 240  
 tgtcgctgct ccacatgctg tcaactgtct cctcccagc cctgcctcat cctcaacccg  
 300  
 ccgtccctct gcgtgtcact ctctgcctgt cctcactggt tcagggaccc ccagcctctc  
 360  
 ttatttcggc tctatctgac cctggctctg cctctgactc tgcccttggc cctccccgtc  
 420  
 atgccccca cactctctct cccccagccc ccgtcctgcg gccccgagga cgacgccag  
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 <213> Homo sapiens

<400> 2098  
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 35 40 45  
 Gln Val Leu Gly Val Gln Leu Gly Leu Ser Val Arg His Pro Pro Pro  
 50 55 60  
 Arg Leu Thr Ser Gly Ser Leu Pro Ala Arg Arg Gly Pro Gly Pro His  
 65 70 75 80  
 Cys Arg Cys Ser Thr Cys Cys His Ser Ser Pro Pro Gln Ser Cys Leu  
 85 90 95  
 Ile Leu Thr Pro Pro Ser Leu Cys Val Ser Leu Ser Ala Cys Pro His  
 100 105 110  
 Trp Phe Arg Asp Pro Gln Pro Leu Phe Ile Arg Leu Tyr Leu Thr Leu  
 115 120 125  
 Ala Leu Pro Leu Thr Leu Pro Leu Ala Pro Pro Val Met Pro Leu Thr  
 130 135 140  
 Leu Ser Leu Pro Gln Pro Pro Ser Cys Gly Pro Glu Asp Asp Ala Gln  
 145 150 155 160  
 Leu Gln Leu Ala Leu Ser Leu Ser Arg Glu His Asp Lys Val Arg  
 165 170 175  
 Ala Ala Ser Leu Ser Leu Pro Leu Pro Gly Ala Pro Leu Arg Pro Ala

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 Pro Thr Gly Ser Arg  
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 180  
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 Thr Cys Pro Arg Gly Ala Gln Trp Arg Gln Cys Pro Gly Leu Leu Cys  
 35                      40                      45  
 Pro Arg Val Cys Pro Gln Thr Ser Leu Pro Arg His Leu Leu His Asp  
 50                      55                      60  
 Pro Gly Gly Gly Arg Gln Trp Gln Tyr Ser Val Gln Val Ser Ser Glu  
 65                      70                      75                      80  
 Val Ala Gly Ala Trp Leu Arg Pro Cys Leu Thr Pro Thr Ala Ser Ala  
 85                      90                      95  
 Ser Ser Pro Leu Ala His Pro Thr Trp Pro  
 100                      105

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<210> 2102  
 <211> 113  
 <212> PRT  
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<400> 2102  
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 His Leu Asp Glu Leu Leu Thr Val Trp Leu Glu Thr Gly Thr Val Arg  
 35 40 45  
 Asp Gln Tyr Val Ala Arg Cys Asp Thr Ile Gly Thr Pro Val Arg Leu  
 50 55 60  
 Thr Phe Asp Pro Glu Ile Val Gly Gly Gly Glu Gly Ala Ile Glu Gly  
 65 70 75 80  
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<210> 2103  
 <211> 459  
 <212> DNA  
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<210> 2104

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2104

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		20					25						30		
His	Glu	Leu	Leu	Ala	Ser	Gly	Val	Trp	Glu	Gly	Asp	Ala	Tyr	Arg	Tyr
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Asp	Gln	Val	Gly	Met	Glu	Ile	Lys	Gly	Asn	Asp	Val	Gly	Ile	Val	Gly
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Cys	Gly	Ala	Val	Gly	Cys	Arg	Val	Ala	Ala	Val	Met	Ala	Ala	Met	Gly
65					70					75				80	
Ala	Thr	Val	Arg	Val	Phe	Asp	Pro	Trp	Ala	Thr	Pro	Asp	Ser	Phe	Pro
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Ala	Gly	Val	Met	Ala	Cys	Asp	Asp	Leu	Asp	Glu	Val	Leu	Arg	Leu	Ser
			100					105					110		
Arg	Ile	Leu	Thr	Leu	His	Ala	Arg	Ala	Asn	Glu	Asp	Asn	Arg	His	Met
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Ile	Gly	Val	Glu	Gln	Leu	Ala	Glu	Met	Pro	Asp	Gly	Ser	Val	Leu	Val
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<210> 2105

<211> 4057

<212> DNA

<213> Homo sapiens

<400> 2105

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<210> 2106

<211> 240

<212> PRT

<213> Homo sapiens

<400> 2106

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Glu	Ala	Pro	Ser	Ser	Leu	Thr	Pro	Ser	Ser	Glu	Leu	Ser	Ser	Pro	Gly	20	25	30	
Gln	Ser	Glu	Leu	Thr	Asn	Met	Asp	Leu	Ala	Ala	Leu	Phe	Ser	Asp	Thr	35	40	45	
Pro	Ala	Asn	Ala	Ser	Gly	Ser	Ala	Gly	Gly	Ser	Asp	Glu	Ala	Leu	Asn	50	55	60	
Ser	Gly	Ile	Leu	Thr	Ile	Asp	Val	Thr	Ser	Val	Ser	Ser	Ser	Leu	Gly	65	70	75	80
Gly	Asn	Leu	Pro	Ala	Asn	Asn	Ser	Ser	Leu	Gly	Pro	Met	Glu	Pro	Leu	85	90	95	
Val	Leu	Val	Ala	His	Ser	Asp	Ile	Pro	Pro	Ser	Leu	Asp	Ser	Pro	Leu	100	105	110	
Val	Leu	Gly	Thr	Ala	Ala	Thr	Val	Leu	Gln	Gln	Gly	Ser	Phe	Ser	Val	115	120	125	
Asp	Asp	Val	Gln	Thr	Val	Ser	Ala	Gly	Ala	Leu	Gly	Cys	Leu	Val	Ala	130	135	140	
Leu	Pro	Met	Lys	Asn	Leu	Ser	Asp	Asp	Pro	Leu	Ala	Leu	Thr	Ser	Asn	145	150	155	160
Ser	Asn	Leu	Ala	Ala	His	Ile	Thr	Thr	Pro	Thr	Ser	Ser	Ser	Thr	Pro	165	170	175	
Arg	Glu	Asn	Ala	Ser	Val	Pro	Glu	Leu	Leu	Ala	Pro	Ile	Lys	Val	Glu	180	185	190	
Pro	Asp	Ser	Pro	Ser	Arg	Pro	Gly	Ala	Val	Gly	Gln	Gln	Glu	Gly	Ser	195	200	205	
His	Gly	Leu	Pro	Gln	Ser	Thr	Leu	Pro	Ser	Pro	Ala	Glu	Gln	His	Gly	210	215	220	
Ala	Gln	Asp	Thr	Glu	Leu	Ser	Ala	Gly	Thr	Gly	Asn	Phe	Tyr	Leu	Val				



225                      230                      235                      240

<210> 2107  
 <211> 305  
 <212> DNA  
 <213> Homo sapiens

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 305

<210> 2108  
 <211> 92  
 <212> PRT  
 <213> Homo sapiens

<400> 2108  
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 20                      25                      30  
 Ser Gly Leu Val Ser Glu Asn Thr Pro Arg Pro Asp Asp Ser Arg Ala  
 35                      40                      45  
 Ile Ala Pro Ala Ser Leu Gln Ile Thr Ser Ser Cys Ser Gly Glu Pro  
 50                      55                      60  
 Leu Asp Leu Asp Ser Lys Asp Val Ser Arg Pro Asp Ser Gln Gly Arg  
 65                      70                      75                      80  
 Leu Cys Pro Ala Ser Asn Pro Ile Leu Ala Xaa Pro  
 85                      90

<210> 2109  
 <211> 700  
 <212> DNA  
 <213> Homo sapiens

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<210> 2110

<211> 233

<212> PRT

<213> Homo sapiens

<400> 2110

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			20					25						30	
Gln	Ala	Lys	Ala	Thr	Lys	Arg	Lys	Tyr	Gln	Ala	Ser	Ser	Glu	Ala	Pro
			35					40						45	
Pro	Ala	Lys	Arg	Arg	Asn	Glu	Thr	Ser	Phe	Leu	Pro	Ala	Lys	Lys	Thr
			50					55						60	
Ser	Val	Lys	Glu	Thr	Gln	Arg	Thr	Phe	Lys	Gly	Asn	Ala	Gln	Lys	Met
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Phe	Ser	Pro	Lys	Lys	His	Ser	Val	Ser	Thr	Ser	Asp	Arg	Asn	Gln	Glu
															95
Glu	Arg	Gln	Cys	Ile	Lys	Thr	Ser	Ser	Leu	Phe	Lys	Asn	Asn	Pro	Asp
															110
Ile	Pro	Glu	Leu	His	Arg	Pro	Val	Val	Lys	Gln	Val	Gln	Glu	Lys	Val
															125
Phe	Thr	Ser	Ala	Ala	Phe	His	Glu	Leu	Gly	Leu	His	Pro	His	Leu	Ile
															140
Ser	Thr	Ile	Asn	Thr	Val	Leu	Lys	Met	Ser	Ser	Met	Thr	Ser	Val	Gln
															160
Lys	Gln	Ser	Ile	Pro	Val	Leu	Leu	Glu	Gly	Arg	Asp	Ala	Leu	Val	Arg
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Ser	Gln	Thr	Gly	Ser	Gly	Lys	Ile	Leu	Ala	Tyr	Cys	Ile	Pro	Val	Val
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Gln	Ser	Leu	Gln	Ala	Met	Glu	Ser	Lys	Ile	Gln	Arg	Ser	Asp	Gly	Pro
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Tyr	Ala	Leu	Val	Leu	Val	Pro	Thr	Arg	Glu	Val	Ser	Arg	Leu	Pro	Phe
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<210> 2111  
 <211> 339  
 <212> DNA  
 <213> Homo sapiens

<400> 2111  
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<210> 2112  
 <211> 113  
 <212> PRT  
 <213> Homo sapiens

<400> 2112  
 Thr Arg Cys Ala Gly Pro Asp Pro Ile Ile Ala Ala Gln Arg Phe Gly  
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 Ala Val Ser Asp Gln Met Glu Ile Thr Arg Lys Ala Leu Lys Lys His  
 20 25 30  
 Gly Arg Gly Asn Lys Leu Ala Ile Ala Glu Leu Val Ala Leu Ala Glu  
 35 40 45  
 Leu Phe Met Pro Ile Lys Leu Val Pro Lys Gln Phe Glu Gly Leu Val  
 50 55 60  
 Glu Arg Val Arg Ser Ala Leu Glu Arg Leu Arg Ala Gln Glu Arg Ala  
 65 70 75 80  
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 85 90 95  
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 100 105 110  
 Leu

<210> 2113  
 <211> 2329  
 <212> DNA  
 <213> Homo sapiens

<400> 2113  
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 120  
 aaagggaagt tgacattaga tagcagtttt aacatcgcca gccagcttc ccaggcctgg  
 180

at tt t t g c a c t t c t g t c a a a a a c t g a g a a a c c a a c a t t c t t t a c c a g a c t g a t g a a c a g  
240  
g a c t t c a c c a g c t g c t t c a t t g a g a c a t t c a a c a g t g g a t g g a a a a c c a g g a c t g t g a t  
300  
g a g c c t g c c c t g t a c c c a t g c t g c a g c c a c t g g a g c t t c c c t a c a a g c a a g a g a t t t t t  
360  
g a a c t g t g c a t c a a g a g a g c t a t c a t g g a g c t g g a a a g g a g t a c a g g g t a c c a t t t g g a t  
420  
a g c a a a a c c c c a g g g c c g a g g t t g a t a t c a a t g a t a c t a t c a g g g c a g t g g t g t t a g a g  
480  
t t c c a g a g t a c c t a c c t c t t c a c a c t g g c t t a t g a a a a g a t g c a t c a g t t t a t a a a g a g  
540  
g t g g a c t c g t g g a t a t c c a g t g a g t t c g g c c c c t g a a g g c c t c a g c a a t g g t t g g  
600  
t t t g t c a g c a a t c t g g a g t t c t a t g a c c t c c a g g a t a g c c t c t c c g a t g g c a c c c t c a t t  
660  
g c c a t g g g g c t g t c a g t t g c t g t t g c a t t t a g c g t g a t g c t g c t g a c a a c t t g g a a c a c t  
720  
a t c a t a a g c c t t t a t g c c a t c a t t t c a a t t g c t g g a a c g a t a t t t g t c a c t g t t g g t t c t  
780  
c t t g t c c t g c t g g g c t g g g a g c t c a a t g t g t g g a a t c t g t c a c c a t t t c g g t t g c c g t c  
840  
g g c t t g t c t g t a g a c t t t g c c g t c a t t a t g g g g t t g c c t a c c g c t t g g c t c c a g a t c c c  
900  
g a c c g a g a a g c a a a g t g a t c t t c t c t c t g a g t c g c g t g g c t c t g c g a t g g c c a t g g c t  
960  
g c c c t g a c c a c c t t c g t g g c a g g g g c c a t g a t g a t t c c c t c c a c a g t t c t a g c t t a c a c c  
1020  
c a g c t g g g c a c c t t c a t g a t g c t c a t c a t g t g a t c a g t t g g g c t t t c g c a c c t t c t t t  
1080  
t t c c a g t g c a t g t g c c g g t g c c t t g g a c c a c a g g g t a c c t g t g g t c a g a t t c c t t t a c c t  
1140  
a a a a a a c t a c a g t g c a g t g c c t t t c c c a t g c c t t g t c t a c a g t c c c a g t g a c a a g g g a  
1200  
c a a a g c a a a a c a c a t a c c a t a a a t g c t t a t c a t t t a g a t c c a g g g g c c c a a a a t c t g a a  
1260  
c t g g a g c a t g a g t t t t a t g a a t a g a a c c t c t g g c t t c c c a c a g c t g c a c t g c c c c t g a g  
1320  
a a g a c c a c t t a t g a a g a g a c c c a c a t c t g c t c t g a a t t t t c a a c a g c c a a g c a a a g a a t  
1380  
t t a g g g a t g c c t g t g c a t g c a g c t t a c a a c a g t g a a c t c a g c a a a g c a c t g a a a g t g a c  
1440  
a c t g g c t c t g c c t t g t t a c a g c c c c t c t t g a a c a g c a t a c c g t g t g t c a c t t c t t c t c t  
1500  
c t g a a t c a g a g a t g t a g c t g c c c c g a t g c c t a c a a c a c t t g a a c t a t g g c c c a c a c t c t  
1560  
t g c c a g c a g a t g g g g g a c t g c t t g t g c c a c a g t g c t c t c t a c c a c t a g c a g c t t t g t c  
1620  
c a g a t c c a a a a c g g c g t g g c a c c t c t g a a g g c a c a c c a a g c t g t c g a g g c t t t g t g  
1680  
c a c c c c a t c a c g c a c a t c c a c a c t g t c c c t g c c t g c a g g c a g a g t a a a g c c a g c c g g a  
1740  
a t g c a g a a t t c t c t g c c t a g g a a t t t t t t c c t c c a c c c a g t g c a g c a c a t t c a g g c c c a a  
1800

gaaaaaattg gcaagaccaa tgtacacagt cttcagagga gcatagaaga gcatcttcca  
 1860  
 aagatggcag agccatcgtc atttgtctgc agaagcactg gatcggtact caaaacgtgt  
 1920  
 tgcgaccccc agaataaaca aagggaactc tgtaaaaata gagacgtgag caatctggag  
 1980  
 agcagtggag ggactgaaaa caaggcagga gggaaagtgg agctgagctt gtcacagacg  
 2040  
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 2100  
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 2160  
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 2220  
 gctgtattaa cacactcgga actttctggt gaaagtttgt taataaaaaac actataataa  
 2280  
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 2329

<210> 2114

<211> 758

<212> PRT

<213> Homo sapiens

<400> 2114

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Leu	His	Met	Pro	Ile	Thr	Val	Ile	Trp	Gly	Val	Ser	Pro	Glu	Asp	Asn
			20					25					30		
Gly	Asn	Pro	Leu	Asn	Pro	Lys	Ser	Lys	Gly	Lys	Leu	Thr	Leu	Asp	Ser
		35				40					45				
Ser	Phe	Asn	Ile	Ala	Ser	Pro	Ala	Ser	Gln	Ala	Trp	Ile	Leu	His	Phe
	50				55				60						
Cys	Gln	Lys	Leu	Arg	Asn	Gln	Thr	Phe	Phe	Tyr	Gln	Thr	Asp	Glu	Gln
65				70				75						80	
Asp	Phe	Thr	Ser	Cys	Phe	Ile	Glu	Thr	Phe	Lys	Gln	Trp	Met	Glu	Asn
			85					90					95		
Gln	Asp	Cys	Asp	Glu	Pro	Ala	Leu	Tyr	Pro	Cys	Cys	Ser	His	Trp	Ser
			100					105					110		
Phe	Pro	Tyr	Lys	Gln	Glu	Ile	Phe	Glu	Leu	Cys	Ile	Lys	Arg	Ala	Ile
			115					120					125		
Met	Glu	Leu	Glu	Arg	Ser	Thr	Gly	Tyr	His	Leu	Asp	Ser	Lys	Thr	Pro
			130				135				140				
Gly	Pro	Arg	Phe	Asp	Ile	Asn	Asp	Thr	Ile	Arg	Ala	Val	Val	Leu	Glu
145				150				155						160	
Phe	Gln	Ser	Thr	Tyr	Leu	Phe	Thr	Leu	Ala	Tyr	Glu	Lys	Met	His	Gln
			165					170						175	
Phe	Tyr	Lys	Glu	Val	Asp	Ser	Trp	Ile	Ser	Ser	Glu	Leu	Ser	Ser	Ala
			180					185					190		
Pro	Glu	Gly	Leu	Ser	Asn	Gly	Trp	Phe	Val	Ser	Asn	Leu	Glu	Phe	Tyr
			195				200					205			
Asp	Leu	Gln	Asp	Ser	Leu	Ser	Asp	Gly	Thr	Leu	Ile	Ala	Met	Gly	Leu
			210				215					220			
Ser	Val	Ala	Val	Ala	Phe	Ser	Val	Met	Leu	Leu	Thr	Thr	Trp	Asn	Ile

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225          230          235          240
Ile Ile Ser Leu Tyr Ala Ile Ile Ser Ile Ala Gly Thr Ile Phe Val
          245          250          255
Thr Val Gly Ser Leu Val Leu Leu Gly Trp Glu Leu Asn Val Leu Glu
          260          265          270
Ser Val Thr Ile Ser Val Ala Val Gly Leu Ser Val Asp Phe Ala Val
          275          280          285
His Tyr Gly Val Ala Tyr Arg Leu Ala Pro Asp Pro Asp Arg Glu Gly
          290          295          300
Lys Val Ile Phe Ser Leu Ser Arg Val Gly Ser Ala Met Ala Met Ala
305          310          315          320
Ala Leu Thr Thr Phe Val Ala Gly Ala Met Met Ile Pro Ser Thr Val
          325          330          335
Leu Ala Tyr Thr Gln Leu Gly Thr Phe Met Met Leu Ile Met Cys Ile
          340          345          350
Ser Trp Ala Phe Ala Thr Phe Phe Gln Cys Met Cys Arg Cys Leu
          355          360          365
Gly Pro Gln Gly Thr Cys Gly Gln Ile Pro Leu Pro Lys Lys Leu Gln
          370          375          380
Cys Ser Ala Phe Ser His Ala Leu Ser Thr Ser Pro Ser Asp Lys Gly
385          390          395          400
Gln Ser Lys Thr His Thr Ile Asn Ala Tyr His Leu Asp Pro Arg Gly
          405          410          415
Pro Lys Ser Glu Leu Glu His Glu Phe Tyr Glu Leu Glu Pro Leu Ala
          420          425          430
Ser His Ser Cys Thr Ala Pro Glu Lys Thr Thr Tyr Glu Glu Thr His
          435          440          445
Ile Cys Ser Glu Phe Phe Asn Ser Gln Ala Lys Asn Leu Gly Met Pro
          450          455          460
Val His Ala Ala Tyr Asn Ser Glu Leu Ser Lys Ser Thr Glu Ser Asp
465          470          475          480
Thr Gly Ser Ala Leu Leu Gln Pro Pro Leu Glu Gln His Thr Val Cys
          485          490          495
His Phe Phe Ser Leu Asn Gln Arg Cys Ser Cys Pro Asp Ala Tyr Lys
          500          505          510
His Leu Asn Tyr Gly Pro His Ser Cys Gln Gln Met Gly Asp Cys Leu
          515          520          525
Cys His Gln Cys Ser Pro Thr Thr Ser Ser Phe Val Gln Ile Gln Asn
          530          535          540
Gly Val Ala Pro Leu Lys Ala Thr His Gln Ala Val Glu Gly Phe Val
545          550          555          560
His Pro Ile Thr His Ile His His Cys Pro Cys Leu Gln Gly Arg Val
          565          570          575
Lys Pro Ala Gly Met Gln Asn Ser Leu Pro Arg Asn Phe Phe Leu His
          580          585          590
Pro Val Gln His Ile Gln Ala Gln Glu Lys Ile Gly Lys Thr Asn Val
          595          600          605
His Ser Leu Gln Arg Ser Ile Glu Glu His Leu Pro Lys Met Ala Glu
          610          615          620
Pro Ser Ser Phe Val Cys Arg Ser Thr Gly Ser Leu Leu Lys Thr Cys
625          630          635          640
Cys Asp Pro Glu Asn Lys Gln Arg Glu Leu Cys Lys Asn Arg Asp Val
          645          650          655
Ser Asn Leu Glu Ser Ser Gly Gly Thr Glu Asn Lys Ala Gly Gly Lys

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        660              665              670
Val Glu Leu Ser Leu Ser Gln Thr Asp Ala Ser Val Asn Ser Glu His
        675              680              685
Phe Asn Gln Asn Glu Pro Lys Val Leu Phe Asn His Leu Met Gly Glu
        690              695              700
Ala Gly Cys Arg Ser Cys Pro Asn Asn Ser Gln Ser Cys Gly Arg Ile
        705              710              715              720
Val Arg Val Lys Cys Asn Ser Val Asp Cys Gln Met Pro Asn Met Glu
        725              730              735
Ala Asn Val Pro Ala Val Leu Thr His Ser Glu Leu Ser Gly Glu Ser
        740              745              750
Leu Leu Ile Lys Thr Leu
        755

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&lt;210&gt; 2115

&lt;211&gt; 461

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2115

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acgcgtctct ggccctgggag cgggctcccc cgacacgccca ccttcctctgc cagatggtgc
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ttctgggtat tccagaatct ggaatggggg atgcctatcc ccttcctgag ccacacctgct
120
ggctctgggt ccttggagcc caccaagtcc acaaccacct gctctgaata gaaagctgac
180
attgaaccga acagccgcgt cggagggggga tatctgtgga gagctgtgac tgggagccgg
240
tgtgtgcctt tctgtgtgca tttctcgagt cctctgccgg ctgctgccag gtgaaggcat
300
ctccatgccc agccggtggg cagctggggc ggggtggacct ccagcttctg cccgacgggg
360
ttcagatgac cgagatccta cgggattgcc aatgtgtggg gacggggggc tttcaggggc
420
gggaaaacat gtcccatcc gtgggaagtg gagccacgtg g
461

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&lt;210&gt; 2116

&lt;211&gt; 146

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2116

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Met Gly Thr Cys Phe Pro Ala Pro Glu Ser Pro Pro Ser Pro His Ile
1          5          10          15
Gly Asn Pro Val Gly Ser Arg Ser Ser Glu Pro Arg Arg Ala Glu Ala
20        25        30
Gly Gly Pro Pro Ala Pro Ala Ala His Arg Leu Gly Met Glu Met Pro
35        40        45
Ser Pro Gly Ser Ser Arg Gln Arg Thr Arg Glu Met Thr Thr Glu Arg
50        55        60
His Thr Pro Ala Pro Ser His Ser Ser Pro Gln Ile Ser Pro Ser Asp
65        70        75        80
Ala Ala Val Arg Phe Asn Val Ser Phe Leu Phe Arg Ala Gly Gly Cys

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85 90 95  
 Gly Leu Gly Gly Leu Gln Gly Pro Lys Thr Ser Arg Trp Ala Gln Glu  
 100 105 110  
 Gly Asp Arg His Pro Pro Phe Gln Ile Leu Glu Tyr Pro Glu Ala Pro  
 115 120 125  
 Ser Gly Arg Glu Gly Gly Val Ser Gly Glu Pro Ala Pro Arg Pro Glu  
 130 135 140  
 Thr Arg  
 145  
  
 <210> 2117  
 <211> 360  
 <212> DNA  
 <213> Homo sapiens  
  
 <400> 2117  
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 cgcgccagcg ttaagacctt ctcgcgggct gtcaccgccg atctggagaa gtgtggaccg  
 120  
 atcaggtgac actcgcggtg gactgaatag atgcctgagt ctgaagacac tgtgtggctg  
 180  
 acccaagagg ccttcgataa gctcaccag gagctggagt acctcaaagg cgaaggccgc  
 240  
 accgtcattg ccaacaagat tgccgacgcc cgttcggaag gcgaccttc tgagaacggc  
 300  
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 360  
  
 <210> 2118  
 <211> 70  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 2118  
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 1 5 10 15  
 Lys Leu Thr Gln Glu Leu Glu Tyr Leu Lys Gly Glu Gly Arg Thr Val  
 20 25 30  
 Ile Ala Asn Lys Ile Ala Asp Ala Arg Ser Glu Gly Asp Leu Ser Glu  
 35 40 45  
 Asn Gly Gly Tyr His Ala Ala Arg Glu Glu Gln Gly Gln Ala Glu Ala  
 50 55 60  
 Arg Ile Arg Gln Leu Glu  
 65 70  
  
 <210> 2119  
 <211> 465  
 <212> DNA  
 <213> Homo sapiens  
  
 <400> 2119  
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 60



cgccccgccc ttgccttggc gttgtctctg gcactgtggc ggactgacca cgccccgggc  
 120  
 atgggctgca agggagacgc gagcggagtt tgctataaaa tgggagttct ggttgacttc  
 180  
 actgttctgt ggctgttctc ctcagtaaag gccgactcaa aagccattac aacctctctt  
 240  
 acaacaaaat ggttttccac tccattgttg ttagaagcca gtgagttttt agcagaagac  
 300  
 agtcaagaga aattttggaa tttttagaaa gccagtcaaa atattggatc atcagatcat  
 360  
 gacgggtaccg attattccta ctatcatgca atattggagg ctgcatttca gtttctgtca  
 420  
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 465

<210> 2120

<211> 115

<212> PRT

<213> Homo sapiens

<400> 2120

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Leu	Val	Val	Leu	Thr	Val	Leu	Trp	Leu	Phe	Ser	Ser	Val	Lys	Ala	Asp
			20					25					30		
Ser	Lys	Ala	Ile	Thr	Thr	Ser	Leu	Thr	Thr	Lys	Trp	Phe	Ser	Thr	Pro
		35					40					45			
Leu	Leu	Leu	Glu	Ala	Ser	Glu	Phe	Leu	Ala	Glu	Asp	Ser	Gln	Glu	Lys
		50				55					60				
Phe	Trp	Asn	Phe	Val	Glu	Ala	Ser	Gln	Asn	Ile	Gly	Ser	Ser	Asp	His
65					70				75					80	
Asp	Gly	Thr	Asp	Tyr	Ser	Tyr	Tyr	His	Ala	Ile	Leu	Glu	Ala	Ala	Phe
			85					90						95	
Gln	Phe	Leu	Ser	Pro	Leu	Gln	Gln	Asn	Leu	Phe	Lys	Phe	Cys	Leu	Ser
			100					105						110	
Leu	His	Ala													
			115												

<210> 2121

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2121

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 120  
 ggaggttctt ttgttacaaa atacaacaag acaaactgtc agttttatgt agataatctc  
 180  
 tactattcaa ctgactatga gtttctggtc tcttttcaca atggagtgtg cgagggagat  
 240  
 tcagttataa gaaatgagtc aacaaatttt aatgctaaag ccctgattat attcctgggtg  
 300

tttctgatta ttgtgacatc aatagccttg cttggt  
336

<210> 2122  
<211> 112  
<212> PRT  
<213> Homo sapiens

<400> 2122  
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Ile Asn Val Thr Cys Gly Pro Pro Tyr Glu Thr Asn Gly Pro Lys Thr  
20 25 30  
Phe Tyr Ile Leu Val Val Arg Ser Gly Gly Ser Phe Val Thr Lys Tyr  
35 40 45  
Asn Lys Thr Asn Cys Gln Phe Tyr Val Asp Asn Leu Tyr Tyr Ser Thr  
50 55 60  
Asp Tyr Glu Phe Leu Val Ser Phe His Asn Gly Val Tyr Glu Gly Asp  
65 70 75 80  
Ser Val Ile Arg Asn Glu Ser Thr Asn Phe Asn Ala Lys Ala Leu Ile  
85 90 95  
Ile Phe Leu Val Phe Leu Ile Ile Val Thr Ser Ile Ala Leu Leu Val  
100 105 110

<210> 2123  
<211> 426  
<212> DNA  
<213> Homo sapiens

<400> 2123  
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120  
tccttcgagc cgaacgctgg ctcccagggc gactacgccc gtctgctggc gatccgcgct  
180  
taccaccaga gccgtggcga tgagcgctgc gacatctgcc tgattccgtc ctctgcccac  
240  
ggcaccaacc cggcaaccgc caacatggcc ggcacgcccg tggctcgtgac cgcttgcgac  
300  
gcccgcggca acgtcgacat cgaagacctg cgcgccaagg ctatcgagca ccgcgaacac  
360  
ctcgcggcgc tgatgatcac ctaccgctc acccacggcg tgttcgaaga aggcacccgc  
420  
gagatc  
426

<210> 2124  
<211> 142  
<212> PRT  
<213> Homo sapiens

<400> 2124  
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Ser Ala Gly Tyr Gln Gln Leu Thr Asp Glu Leu Glu Ala Met Leu Cys
      20           25           30
Ala Ala Thr Gly Tyr Asp Ala Ile Ser Leu Gln Pro Asn Ala Gly Ser
      35           40           45
Gln Gly Glu Tyr Ala Gly Leu Leu Ala Ile Arg Ala Tyr His Gln Ser
      50           55           60
Arg Gly Asp Glu Arg Arg Asp Ile Cys Leu Ile Pro Ser Ser Ala His
      65           70           75           80
Gly Thr Asn Pro Ala Thr Ala Asn Met Ala Gly Met Arg Val Val Val
      85           90           95
Thr Ala Cys Asp Ala Arg Gly Asn Val Asp Ile Glu Asp Leu Arg Ala
      100          105          110
Lys Ala Ile Glu His Arg Glu His Leu Ala Ala Leu Met Ile Thr Tyr
      115          120          125
Pro Ser Thr His Gly Val Phe Glu Glu Gly Ile Arg Glu Ile
      130          135          140

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&lt;210&gt; 2125

&lt;211&gt; 285

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2125

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120
ctaaaggcgg ctgaagacgc ggcaccaccg gctgtcaccg ttgaagcggc caaggaagag
180
aagccgaagc caccaccaat tggacctaaag agaggagcca aggtgagaat tcttaggaag
240
gagtcatact ggttcaaagg agtgggatca gttgtgactg ttgat
285

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&lt;210&gt; 2126

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2126

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Xaa Met Ala Ser Ala Ala Ser Ser Phe Val Val Thr Pro Asn Val Thr
      1           5           10           15
Ser Asn Thr Thr Thr Val Lys Pro Asn Met Val Met Leu Pro Ile Gln
      20           25           30
Asn Thr Arg Gly Ser Arg Leu Val Leu Lys Ala Ala Glu Asp Ala Ala
      35           40           45
Pro Pro Ala Val Thr Val Glu Ala Ala Lys Glu Glu Lys Pro Lys Pro
      50           55           60
Pro Pro Ile Gly Pro Lys Arg Gly Ala Lys Val Arg Ile Leu Arg Lys
      65           70           75           80
Glu Ser Tyr Trp Phe Lys Gly Val Gly Ser Val Val Thr Val Asp
      85           90           95

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<210> 2127  
 <211> 454  
 <212> DNA  
 <213> Homo sapiens

<400> 2127  
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 120  
 atgcagtact gcatgatgca acaggggctt gccagcttga tggcgtgtcc gtccttgatg  
 180  
 ctgcagcaac tgttggcctt accgcttcag acgatgccag tgatgatgcc acagatgatg  
 240  
 acgcctaaca tgatgtcacc attgatgatg ccgagcatga tgtcaccaat ggtcttgccg  
 300  
 agcatgatgt cgcaaatgat gatgccacaa tgtcactgcg acgccgtctc gcagattatg  
 360  
 ctgcaacagc agttaccatt catgttcaac ccaatggcca tgacgattcc acccatgttc  
 420  
 ttacagcaac cctttgttgg tgctgcattc taga  
 454

<210> 2128  
 <211> 150  
 <212> PRT  
 <213> Homo sapiens

<400> 2128  
 Met Ala Ala Lys Met Leu Ala Leu Phe Ala Leu Leu Ala Leu Cys Ala  
 1 5 10 15  
 Ser Ala Thr Ser Ala Thr His Ile Pro Gly His Leu Ser Pro Val Met  
 20 25 30  
 Pro Leu Gly Thr Met Asn Pro Cys Met Gln Tyr Cys Met Met Gln Gln  
 35 40 45  
 Gly Leu Ala Ser Leu Met Ala Cys Pro Ser Leu Met Leu Gln Gln Leu  
 50 55 60  
 Leu Ala Leu Pro Leu Gln Thr Met Pro Val Met Met Pro Gln Met Met  
 65 70 75 80  
 Thr Pro Asn Met Met Ser Pro Leu Met Met Pro Ser Met Met Ser Pro  
 85 90 95  
 Met Val Leu Pro Ser Met Met Ser Gln Met Met Met Pro Gln Cys His  
 100 105 110  
 Cys Asp Ala Val Ser Gln Ile Met Leu Gln Gln Gln Leu Pro Phe Met  
 115 120 125  
 Phe Asn Pro Met Ala Met Thr Ile Pro Pro Met Phe Leu Gln Gln Pro  
 130 135 140  
 Phe Val Gly Ala Ala Phe  
 145 150

<210> 2129  
 <211> 354  
 <212> DNA  
 <213> Homo sapiens

<400> 2129  
acgcgtgact tggatgaacaa acccatatcc atcacccctc tcggtgttga tacggaata  
60  
ctcacgcctt ttgacaagcg gcgtgatgcg aacggcggcg acgggggtgg gcgcacggg  
120  
actatcaagg ctctccactc caaatatggg atcgggtgaac tcatccgtgc cttcagtcgg  
180  
gtccatgatg aacggcctaa taccgtcctt cgtatctggg gcggcggccc agacgagaat  
240  
cccccaagg tcttggtcgc ccgtcttgtc ccggacgggt cgggtggagt tcgcggtgcc  
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attgatcatt ctgaggtcag aaatgccttg ggtagtttgg acatctttgc cgcc  
354

<210> 2130  
<211> 118  
<212> PRT  
<213> Homo sapiens

<400> 2130  
Thr Arg Asp Leu Val Asn Lys Pro Ile Ser Ile Thr Pro Phe Gly Val  
1 5 10 15  
Asp Thr Glu Ile Leu Thr Pro Phe Asp Lys Arg Arg Asp Ala Asn Gly  
20 25 30  
Gly Asp Gly Val Val Arg Ile Gly Thr Ile Lys Ala Leu His Ser Lys  
35 40 45  
Tyr Gly Ile Gly Glu Leu Ile Arg Ala Phe Ser Arg Val His Asp Glu  
50 55 60  
Arg Pro Asn Thr Val Leu Arg Ile Trp Gly Gly Gly Pro Asp Glu Asn  
65 70 75 80  
Pro Leu Lys Val Leu Ala Arg Arg Leu Val Pro Asp Gly Ser Val Glu  
85 90 95  
Phe Arg Gly Ala Ile Asp His Ser Glu Val Arg Asn Ala Leu Gly Ser  
100 105 110  
Leu Asp Ile Phe Ala Ala  
115

<210> 2131  
<211> 324  
<212> DNA  
<213> Homo sapiens

<400> 2131  
gcacgcggc cattgggttat gtgtgcctat tccattggtt atgtggaagg ttgggatcag  
60  
ccagacagtc attatgatgg tttgttacag ctgggcgagt ggggctttcg aatcaatgac  
120  
ctgatgaaga cggtagaggg cgcggcaggg tgcattgagt attatgaaat gctcaacgaa  
180  
caacgccccg acctgtctta tgacatagac ggtattgttt ataaagttga tcagattgac  
240  
ctgcaagaag agcttggttt tattgtctgt gcgccacgct gggcaattgc tcgaaaaatt  
300

cctgctcaag aagaagttac gcgt  
324

<210> 2132  
<211> 108  
<212> PRT  
<213> Homo sapiens

<400> 2132  
Ala Ser Arg Pro Leu Val Met Cys Ala Tyr Ser Ile Gly Tyr Val Glu  
1 5 10 15  
Gly Trp Asp Gln Pro Asp Ser His Tyr Asp Gly Leu Leu Gln Leu Gly  
20 25 30  
Glu Trp Gly Phe Arg Ile Asn Asp Leu Met Lys Thr Val Glu Gly Ala  
35 40 45  
Ala Gly Cys Ile Glu Tyr Tyr Glu Met Leu Asn Glu Gln Arg Pro Asp  
50 55 60  
Leu Ser Tyr Asp Ile Asp Gly Ile Val Tyr Lys Val Asp Gln Ile Asp  
65 70 75 80  
Leu Gln Glu Glu Leu Gly Phe Ile Ala Arg Ala Pro Arg Trp Ala Ile  
85 90 95  
Ala Arg Lys Phe Pro Ala Gln Glu Glu Val Thr Arg  
100 105

<210> 2133  
<211> 292  
<212> DNA  
<213> Homo sapiens

<400> 2133  
ggtacctgca atatgggtatt gcatgacatg aataaatttt tccttactct gaactcacta  
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gtggctgtct ttagaggacc cggcgaactt ttctgtcttt ttcccacttg ctccatcaca  
120  
tacatcacat caccaacacc catcacatac atacacagtc atgaacggcc atcaggccac  
180  
accagattac atcgctgtgg atccaacctt gcatttttct gcccttcctt tactgcgagt  
240  
gtcacctcta cccggaaagg tcttcaacct ccaagtttcc cagtaattta tt  
292

<210> 2134  
<211> 93  
<212> PRT  
<213> Homo sapiens

<400> 2134  
Met Val Leu His Asp Met Asn Lys Phe Phe Leu Thr Leu Asn Ser Leu  
1 5 10 15  
Val Ala Val Phe Arg Gly Pro Gly Glu Leu Phe Leu Leu Phe Pro Thr  
20 25 30  
Cys Ser Ile Thr Tyr Ile Thr Ser Pro Thr Pro Ile Thr Tyr Ile His  
35 40 45  
Ser His Glu Arg Pro Ser Gly His Thr Arg Leu His Arg Cys Gly Ser

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      50              55              60
Asn Pro Ala Phe Ser Cys Pro Ser Phe Thr Ala Ser Val Thr Ser Thr
65              70              75              80
Arg Lys Gly Leu Gln Pro Pro Ser Phe Pro Val Ile Tyr
      85              90

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<210> 2135  
 <211> 439  
 <212> DNA  
 <213> Homo sapiens

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<400> 2135
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actccgagcg tcgaccaaat cgagatgcat cctcgttca accaggcgac cttccgcgca
120
gagctggcgg agcgcggcat taaccgggag gcctggagcc cgctggggcca gtcgaaggac
180
ctcgacaatc ccgtctctac cgatatttcc aaggcgactg gaaagacgcc tgcccagggtg
240
gtcattcgct ggcacctgca gatcggcaac gtggtattcc ccaagtcggt gacaccatca
300
cgaattgcgg agaactttga tgtgttcgat ttcgagctgt ctgacgagca gatcgccgca
360
attgatggcc tggatcacgg caacaggctc ggtggtgacc cttctaccgc cgacttctga
420
ttctgcaaca ataaccggt
439

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<210> 2136  
 <211> 139  
 <212> PRT  
 <213> Homo sapiens

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<400> 2136
Thr Arg Ser Ile Gly Val Ser Asn Phe Lys Thr Glu His Leu Asp Ala
1      5      10      15
Ile Glu Gly Ala Thr Pro Ser Val Asp Gln Ile Glu Met His Pro Ser
20     25     30
Phe Asn Gln Ala Thr Phe Arg Ala Glu Leu Ala Glu Arg Gly Ile Asn
35     40     45
Pro Glu Ala Trp Ser Pro Leu Gly Gln Ser Lys Asp Leu Asp Asn Pro
50     55     60
Val Leu Thr Asp Ile Ser Lys Ala Thr Gly Lys Thr Pro Ala Gln Val
65     70     75     80
Val Ile Arg Trp His Leu Gln Ile Gly Asn Val Val Phe Pro Lys Ser
85     90     95
Val Thr Pro Ser Arg Ile Ala Glu Asn Phe Asp Val Phe Asp Phe Glu
100    105    110
Leu Ser Asp Glu Gln Ile Ala Ala Ile Asp Gly Leu Asp His Gly Asn
115    120    125
Arg Leu Gly Gly Asp Pro Ser Thr Ala Asp Phe
130    135

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<210> 2137  
 <211> 330  
 <212> DNA  
 <213> Homo sapiens

<400> 2137  
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 tccgggacag agatggctgg cggagcctgg ggccgcctgg cctgttactt ggagttcctg  
 120  
 aagaaggagg agctgaagga gttccagctt ctgctcgcca ataaagcgca ctccaggagc  
 180  
 tcttccgggtg agacaccgcg tcagccagag aagacgagtg gcatggaggt ggcctcgta  
 240  
 ctggtggctc agtatgggga gcagcgggccc tgggacctag ccctccatac ctgggagcag  
 300  
 atggggctga ggtcactgtg cgccaagcc  
 330

<210> 2138  
 <211> 86  
 <212> PRT  
 <213> Homo sapiens

<400> 2138  
 Met Ala Gly Gly Ala Trp Gly Arg Leu Ala Cys Tyr Leu Glu Phe Leu  
 1 5 10 15  
 Lys Lys Glu Glu Leu Lys Glu Phe Gln Leu Leu Leu Ala Asn Lys Ala  
 20 25 30  
 His Ser Arg Ser Ser Ser Gly Glu Thr Pro Ala Gln Pro Glu Lys Thr  
 35 40 45  
 Ser Gly Met Glu Val Ala Ser Tyr Leu Val Ala Gln Tyr Gly Glu Gln  
 50 55 60  
 Arg Ala Trp Asp Leu Ala Leu His Thr Trp Glu Gln Met Gly Leu Arg  
 65 70 75 80  
 Ser Leu Cys Ala Gln Ala  
 85

<210> 2139  
 <211> 433  
 <212> DNA  
 <213> Homo sapiens

<400> 2139  
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 gtgaacaagc tggcgagtag catcgcccag tacaacgac agatttccaa agtcaccacc  
 120  
 gccgcccgggtg ccccgaaacga cctgctggac cagcgagcag aggcgggtgcg ccagttgtcc  
 180  
 gagctggctg ggacccaggt ggtccagcgc ggttcgagtt atgacgtcta ttcgggcagc  
 240  
 ggtcagcgcc tggatgatggg caacagcacc aacaccctgt ccgcagtgcc gagcaaggac  
 300



gacccgagcc agtcggcctt gcagctggat cgcggcacca gcaccgtcga tatcacctcc  
 360  
 acggtgaccg gtggcgagat cgggtggtctg ctgcgctatc gcagcgatgt gctcgacccg  
 420  
 tcgatcaacg cgt  
 433

<210> 2140  
 <211> 144  
 <212> PRT  
 <213> Homo sapiens

<400> 2140  
 Glu Gln Leu Ser Ala Gln Asn Thr Gly Ile Asn Ser Asn Leu Ser Asp  
 1 5 10 15  
 Met Ala Gly Gln Val Asn Lys Leu Ala Ser Thr Ile Ala Gln Tyr Asn  
 20 25 30  
 Asp Gln Ile Ser Lys Val Thr Thr Ala Ala Gly Ala Pro Asn Asp Leu  
 35 40 45  
 Leu Asp Gln Arg Ser Glu Ala Val Arg Gln Leu Ser Glu Leu Val Gly  
 50 55 60  
 Thr Gln Val Val Gln Arg Gly Ser Ser Tyr Asp Val Tyr Ile Gly Ser  
 65 70 75 80  
 Gly Gln Arg Leu Val Met Gly Asn Ser Thr Asn Thr Leu Ser Ala Val  
 85 90 95  
 Pro Ser Lys Asp Asp Pro Ser Gln Ser Ala Leu Gln Leu Asp Arg Gly  
 100 105 110  
 Thr Ser Thr Val Asp Ile Thr Ser Thr Val Thr Gly Gly Glu Ile Gly  
 115 120 125  
 Gly Leu Leu Arg Tyr Arg Ser Asp Val Leu Asp Pro Ser Ile Asn Ala  
 130 135 140

<210> 2141  
 <211> 426  
 <212> DNA  
 <213> Homo sapiens

<400> 2141  
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 gttttatcctt atctttcttt cgccttgatc aatgatattg tggataaagg cgaagtgtta  
 120  
 ggtgacccaa ttgcttgtca tgttaaataat cgtaaaggta ttaacaaagg cttgatgaaa  
 180  
 atcctgtcta aaatgggtat ttcaacgatt gcctcttata gtgggtgcgca attgtttgaa  
 240  
 gcggttggct tggataactaa agtgggtcgac ctttgtttca aaggcggttc aagtcgtatc  
 300  
 aaagggtgctc gttttgaaga tttccagcgt gatcaagcaa cgattgccaa taatgcttgg  
 360  
 aagttacgta aacctattca acagggcggt tatcttaaat acgtacatga ctctgagtat  
 420  
 cacgcg  
 426

&lt;210&gt; 2142

&lt;211&gt; 142

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2142

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Xaa Tyr Pro Cys Ser Asp Pro His Gln Phe Ala Val Leu Leu Gly Phe
 1             5             10             15
Gly Ala Thr Ala Val Tyr Pro Tyr Leu Ser Phe Arg Leu Ile Asn Asp
      20             25             30
Met Val Asp Lys Gly Glu Val Leu Gly Asp Pro Ile Ala Cys His Val
      35             40             45
Lys Tyr Arg Lys Gly Ile Asn Lys Gly Leu Met Lys Ile Leu Ser Lys
      50             55             60
Met Gly Ile Ser Thr Ile Ala Ser Tyr Arg Gly Ala Gln Leu Phe Glu
65             70             75             80
Ala Val Gly Leu Asp Thr Lys Val Val Asp Leu Cys Phe Lys Gly Val
      85             90             95
Ala Ser Arg Ile Lys Gly Ala Arg Phe Glu Asp Phe Gln Arg Asp Gln
      100            105            110
Ala Thr Ile Ala Asn Asn Ala Trp Lys Leu Arg Lys Pro Ile Gln Gln
      115            120            125
Gly Gly Tyr Leu Lys Tyr Val His Asp Ser Glu Tyr His Ala
      130            135            140

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&lt;210&gt; 2143

&lt;211&gt; 1008

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2143

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gccggcttga caagcatgtt caccgggtgac gctgtcgtga tcgtcgaggt gagccaattg
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tgtcatattg tacgcagtat gtcttttcaa cgattcttgg cgggggtggc agccatcttg
120
cttctcctgc ctactcgtg cgtgatgat gcgcaggcgc ccgttgtcga taacctcggg
180
acggtcctca gccccccaa ctccctcatt cgcgagccgg cgaattcgtc agtcaacggg
240
acgctcaaga gcacatatga gtacctcgg ctcacgacg gtcacgatct acccgacgac
300
gatggctacg ctcacgatca tctggtcgcg gctttgcgcc cgtatttggt gaatggtgga
360
gacagtcggc agggccacgt cacccaactc atggcgggcg catccctgaa aacctcaac
420
gcgttgctcg acaaggagag atcagaggtc gacaaacgta cccgcctgcc gaagggtgc
480
atcacgagaa agacgggtgat gacggatctg cccatcgca cgatgaggcg ggagatcggc
540
ctgtccaacg acgggttggt cctcacaccg tggaagggtc agacgacttc ttccgaggag
600
gctcggtggg cgatgcaggc gctggccagt gccgacctat tcagcaatgc taaggacgcc
660

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gagaaatggg ggtgggagtc gatctcggac gggattttgc gccatctcga gacctacagt  
 720  
 ggcccgagta cgactatcgc gatggccttg tcggcggcga ataccgtctc tacattgtct  
 780  
 cgttcccagt tgcaacgcat cggcgacagt ctgcgggatg cgccatatcc gaggaaggac  
 840  
 cttgggtccg cgctcattcg caatggaaag ccggtcaagg acaagtgcag tatcgaatcg  
 900  
 gcgtacctgt tgaggtattc cgggaattgg gcgtggtgac atgacggttt cttggcaagg  
 960  
 tgtgaccaag acattcccct cgggcgattc cgcgcgtggg ggggtgcac  
 1008

<210> 2144

<211> 307

<212> PRT

<213> Homo sapiens

<400> 2144

Met	Phe	Thr	Gly	Asp	Ala	Val	Val	Ile	Val	Glu	Val	Ser	Gln	Leu	Cys
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His	Ile	Val	Arg	Ser	Met	Ser	Phe	Gln	Arg	Phe	Leu	Ala	Gly	Val	Ala
			20					25					30		
Ala	Ile	Leu	Leu	Leu	Pro	Thr	Ala	Cys	Ala	Asp	Asp	Ala	Gln	Ala	
		35				40				45					
Pro	Val	Val	Asp	Asn	Leu	Gly	Thr	Val	Leu	Ser	Pro	Ser	Asn	Ser	Leu
		50			55					60					
Ile	Arg	Glu	Pro	Ala	Asn	Ser	Ser	Val	Asn	Gly	Thr	Leu	Lys	Ser	Thr
65				70					75					80	
Tyr	Glu	Tyr	Leu	Arg	Leu	Ile	Asp	Gly	His	Asp	Leu	Pro	Asp	Asp	Asp
			85					90					95		
Gly	Tyr	Ala	His	Asp	His	Leu	Val	Ala	Ala	Leu	Arg	Pro	Tyr	Leu	Val
		100					105						110		
Asn	Gly	Gly	Asp	Ser	Arg	Gln	Ala	His	Val	Thr	Gln	Leu	Met	Ala	Ala
		115				120					125				
Ser	Ser	Leu	Lys	Thr	Leu	Asn	Ala	Leu	Ser	Asp	Lys	Glu	Arg	Ser	Glu
		130			135						140				
Val	Asp	Lys	Arg	Thr	Arg	Leu	Pro	Lys	Gly	Cys	Ile	Thr	Arg	Lys	Thr
145			150						155					160	
Val	Met	Thr	Asp	Leu	Pro	Ile	Ala	Thr	Met	Arg	Arg	Glu	Ile	Gly	Leu
			165					170						175	
Ser	Asn	Asp	Gly	Leu	Cys	Leu	Thr	Pro	Trp	Lys	Val	Lys	Thr	Thr	Ser
		180					185						190		
Ser	Glu	Glu	Ala	Arg	Trp	Ala	Met	Gln	Ala	Leu	Ala	Ser	Ala	Asp	Leu
		195				200					205				
Phe	Ser	Asn	Ala	Lys	Asp	Ala	Glu	Lys	Trp	Gly	Trp	Glu	Ser	Ile	Ser
		210			215					220					
Asp	Gly	Tyr	Leu	Arg	His	Leu	Glu	Thr	Tyr	Ser	Gly	Pro	Ser	Thr	Thr
225				230					235					240	
Ile	Ala	Met	Ala	Leu	Ser	Ala	Ala	Asn	Thr	Val	Ser	Thr	Leu	Ser	Arg
			245					250						255	
Ser	Gln	Leu	Gln	Arg	Ile	Gly	Asp	Ser	Leu	Ala	Asp	Ala	Pro	Tyr	Pro
		260					265						270		
Arg	Lys	Asp	Leu	Gly	Pro	Ala	Leu	Ile	Arg	Asn	Gly	Lys	Pro	Val	Lys

275                      280                      285  
 Asp Lys Cys Ser Ile Glu Ser Ala Tyr Leu Leu Arg Tyr Ser Gly Asn  
 290                      295                      300  
 Trp Ala Trp  
 305

<210> 2145  
 <211> 389  
 <212> DNA  
 <213> Homo sapiens

<400> 2145  
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 atgacaaccc ttgaacaatc attatctcaa attcccgcac ttctgattat tcatgaacat  
 120  
 ttatttagct cggcccagcc ttctgctgaa caactaaaat tgattaaaga gtttggttgt  
 180  
 agcacagtca ttaaccttgc tttactaat gcttcaaacc atcttgagaa tgaagaccgt  
 240  
 attgttttag accttggttt aaattatatt catattccaa ttgattggga gatgccttct  
 300  
 gctgagcagt gcttattagt tttagatttg attgatcatt tagtgcaaaa tgaaattgtt  
 360  
 tggatacatt gcgccaaaaa taaacgcgt  
 389

<210> 2146  
 <211> 109  
 <212> PRT  
 <213> Homo sapiens

<400> 2146  
 Met Thr Thr Leu Glu Gln Ser Leu Ser Gln Ile Pro Ala Phe Ser Ile  
 1                      5                      10                      15  
 Ile His Glu His Leu Phe Ser Ser Ala Gln Pro Ser Ala Glu Gln Leu  
 20                      25                      30  
 Lys Leu Ile Lys Glu Phe Gly Cys Ser Thr Val Ile Asn Leu Ala Leu  
 35                      40                      45  
 Thr Asn Ala Ser Asn His Leu Glu Asn Glu Asp Arg Ile Cys Leu Asp  
 50                      55                      60  
 Leu Gly Leu Asn Tyr Ile His Ile Pro Ile Asp Trp Glu Met Pro Ser  
 65                      70                      75                      80  
 Ala Glu Gln Cys Leu Leu Val Leu Asp Leu Ile Asp His Leu Val Gln  
 85                      90                      95  
 Asn Glu Ile Val Trp Ile His Cys Ala Lys Asn Lys Arg  
 100                      105

<210> 2147  
 <211> 235  
 <212> DNA  
 <213> Homo sapiens

<400> 2147

ctccctgctg gctgcgtctc cgaggacatg tgcagtcctg acccctgttt caatgggtgg  
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 acttgccctg tcacctggaa tgacttccac tgtacctgcc ctgccaatTT caccggggcct  
 120  
 acatgtgccc agcagctgtg gtgtcccggc cagccctgtc tcccacctgc cagtggtgtg  
 180  
 gcggaggcca cgttccgcga gggccccccc gccgcgttca gcgggcacaa cgcgt  
 235

<210> 2148  
 <211> 78  
 <212> PRT  
 <213> Homo sapiens

<400> 2148  
 Leu Pro Ala Gly Cys Val Ser Glu Asp Met Cys Ser Pro Asp Pro Cys  
 1 5 10 15  
 Phe Asn Gly Gly Thr Cys Leu Val Thr Trp Asn Asp Phe His Cys Thr  
 20 25 30  
 Cys Pro Ala Asn Phe Thr Gly Pro Thr Cys Ala Gln Gln Leu Trp Cys  
 35 40 45  
 Pro Gly Gln Pro Cys Leu Pro Pro Ala Thr Cys Val Ala Glu Ala Thr  
 50 55 60  
 Phe Arg Glu Gly Pro Pro Ala Ala Phe Ser Gly His Asn Ala  
 65 70 75

<210> 2149  
 <211> 1474  
 <212> DNA  
 <213> Homo sapiens

<400> 2149  
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 120  
 caacacgtgg gagtaagact tctcctgctc tttgccagtg gtctgaggtg atgaaccacc  
 180  
 ctggccttgggt gtgctgtgtc cagcaaaacta caggggtgcc gctggtagtt atggtgaaac  
 240  
 cagacacttt tcttatccac gagattaaga ctcttcctgc taaagcgaag atccaagaca  
 300  
 tggttgctat taggcacacg gcctgcaatg agcagcagcg gacaacaatg attctgctgt  
 360  
 gtgaggatgg cagcctgcgc atttcatgg ccaacgtgga gaacacctcc tactggctgc  
 420  
 agccatccct gcagcccagc agtgtcatca gcatcatgaa gcctgttcga aagcgcaaaa  
 480  
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 540  
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 660

ggaggcttca ccattgagat tagtaacaac aatagcacta tggatgatgac aggcattgcgg  
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 atccagattg ggactcaagc aatagaacgg gccccgtcat atatcgagat ctccggcaga  
 780  
 actatgcagc tcaacctgag tcgctcacgc tggtttgact tcccccttcac cagagaagaa  
 840  
 gccctgcagg ctgataagaa gctgaacctc ttcatctggg cctcggtgga tccagcaggt  
 900  
 gtcaccatga tagatgctgt aaaaatttat ggcaagacta aggagcagtt tggctggcct  
 960  
 gatgagcccc cagaagaatt cccttctgcc tctgtcagca acatctgccc ttcaaactctg  
 1020  
 aaccagagca acggcactgg agatagcgac tcagctgccc ccactacgac cagtgggaact  
 1080  
 gtcttgagga ggctggttgt gagttcttta gaagccctgg aaagctgctt tgccgttggc  
 1140  
 ccaatcatcg agaaggagag aaacaagaat gctgctcagg agctggccac ttgctgttg  
 1200  
 tccctgccag cacctgccag tgtccagcag cagtccaaga gccttctggc cagcctgcac  
 1260  
 accagccgct cggcctacca cagccacaag gtaactgttc tctcaggaa aggaaattgc  
 1320  
 agtgctgaca gggaatcaaa taagtttagct ctctattgta aagcaacagc acagcaaagt  
 1380  
 aaggtagagg gaggatagca ttcagattag acctacattt tacagagttt ctctgagaa  
 1440  
 attctcaagt gccactcaaa actgagggtg agcc  
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<210> 2150

<211> 312

<212> PRT

<213> Homo sapiens

<400> 2150

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1				5					10					15	
Ser	Gln	Val	Thr	Phe	Pro	Ile	Asp	Phe	Phe	Glu	His	Asn	Gln	Gln	Leu
		20						25					30		
Thr	Asp	Val	Glu	Phe	Gly	Gly	Asn	Asp	Leu	Leu	Gln	Val	Tyr	Asn	Ala
		35					40					45			
Gln	Gln	Ile	Lys	His	Arg	Leu	Asn	Ser	Thr	Gly	Met	Tyr	Val	Ala	Asn
		50				55					60				
Thr	Lys	Pro	Gly	Gly	Phe	Thr	Ile	Glu	Ile	Ser	Asn	Asn	Asn	Ser	Thr
65					70					75				80	
Met	Val	Met	Thr	Gly	Met	Arg	Ile	Gln	Ile	Gly	Thr	Gln	Ala	Ile	Glu
			85					90					95		
Arg	Ala	Pro	Ser	Tyr	Ile	Glu	Ile	Phe	Gly	Arg	Thr	Met	Gln	Leu	Asn
		100						105					110		
Leu	Ser	Arg	Ser	Arg	Trp	Phe	Asp	Phe	Pro	Phe	Thr	Arg	Glu	Glu	Ala
		115					120					125			
Leu	Gln	Ala	Asp	Lys	Lys	Leu	Asn	Leu	Phe	Ile	Gly	Ala	Ser	Val	Asp
		130				135					140				
Pro	Ala	Gly	Val	Thr	Met	Ile	Asp	Ala	Val	Lys	Ile	Tyr	Gly	Lys	Thr

```

145          150          155          160
Lys Glu Gln Phe Gly Trp Pro Asp Glu Pro Pro Glu Glu Phe Pro Ser
          165          170          175
Ala Ser Val Ser Asn Ile Cys Pro Ser Asn Leu Asn Gln Ser Asn Gly
          180          185          190
Thr Gly Asp Ser Asp Ser Ala Ala Pro Thr Thr Thr Ser Gly Thr Val
          195          200          205
Leu Glu Arg Leu Val Val Ser Ser Leu Glu Ala Leu Glu Ser Cys Phe
          210          215          220
Ala Val Gly Pro Ile Ile Glu Lys Glu Arg Asn Lys Asn Ala Ala Gln
225          230          235          240
Glu Leu Ala Thr Leu Leu Ser Leu Pro Ala Pro Ala Ser Val Gln
          245          250          255
Gln Gln Ser Lys Ser Leu Leu Ala Ser Leu His Thr Ser Arg Ser Ala
          260          265          270
Tyr His Ser His Lys Val Thr Val Leu Ser Gly Lys Gly Asn Cys Ser
          275          280          285
Ala Asp Arg Glu Ser Asn Lys Leu Ala Leu His Cys Lys Ala Thr Ala
          290          295          300
Gln Gln Ser Lys Val Glu Gly Gly
305          310

```

```

<210> 2151
<211> 511
<212> DNA
<213> Homo sapiens

```

```

<400> 2151
gccggcggttt acctgtgggg cccggtcggg cgcggcaaga cctggctgat ggatcaattc
60
caccaaaagcc tgnncgggtg ccggcgcnng cggcagcact ttcatacatt catgggctgg
120
gtgcatcagc gtccttttca gttgaccggg atcgccgac cattgcgggc gctggctcgt
180
gagctggcgg ccgaggtgcg ggtgctgtgt ttcgatgagc tgttcgtcaa tgacatcggt
240
gacgcgatca ttctcgggcg cctgtttcag gtgatgttcg acgcaggcgt ggtggtggtc
300
tgcacctcca atctgccgcc ggatcagctg tatgccgacg gcttcaaccg cgaccgcttc
360
ctgccggcga tcaccgcgat caaacagcac atgcaagtgg tcgcggtgaa tggcgcggaa
420
gatcatcgct tgcattcccg cgccatcgag cagcggttact gggtcgctct gccggagcag
480
ggtagcgcgt tgagccaggt gttcgacgcg t
511

```

```

<210> 2152
<211> 170
<212> PRT
<213> Homo sapiens

```

```

<400> 2152
Ala Gly Val Tyr Leu Trp Gly Pro Val Gly Arg Gly Lys Thr Trp Leu

```

```

      1           5           10           15
Met Asp Gln Phe His Gln Ser Leu Xaa Gly Cys Arg Arg Xaa Arg Gln
      20           25           30
His Phe His His Phe Met Gly Trp Val His Gln Arg Ser Phe Gln Leu
      35           40           45
Thr Gly Ile Ala Asp Pro Leu Arg Ala Leu Ala Arg Glu Leu Ala Ala
      50           55           60
Glu Val Arg Val Leu Cys Phe Asp Glu Leu Phe Val Asn Asp Ile Gly
      65           70           75           80
Asp Ala Ile Ile Leu Gly Arg Leu Phe Gln Val Met Phe Asp Ala Gly
      85           90           95
Val Val Val Val Cys Thr Ser Asn Leu Pro Pro Asp Gln Leu Tyr Ala
      100          105          110
Asp Gly Phe Asn Arg Asp Arg Phe Leu Pro Ala Ile Thr Ala Ile Lys
      115          120          125
Gln His Met Gln Val Val Ala Val Asn Gly Ala Glu Asp His Arg Leu
      130          135          140
His Pro Gly Ala Ile Glu Gln Arg Tyr Trp Val Ala Leu Pro Glu Gln
      145          150          155          160
Gly Ser Ala Leu Ser Gln Val Phe Asp Ala
      165          170

```

<210> 2153  
 <211> 528  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2153
nnaccggtgc caaagagctg gggatcaacc tgccgaacac cgccggtacg cagcaggtgt
60
tcagtacgtg cacggcgatt ggcggcggca attggggacca ctccgcgctg atcaagggcc
120
tggagcatat ggccaacttt tcgattcgcg atcaataage cacaccgctc ccacctttga
180
tggcattcca agtctgaaat tgatccatct ctaataacaa aaatccccgg gagcccgctt
240
atgtcggtcg atccgcaaca cctgcttcgc gagctgtttg ccacagccat cgatgccgcc
300
caccgccggc atgtccttga accttatctg cccgctgacc gcacaggccg tgtgattgtg
360
attggggccc gcaaaaccgc acccgccatg gccctcgtcg tcgagaacgg ctggcaaggc
420
gaagtcaccg gcctgggtgg caccgctac ggccacggcg cgccgtgcaa aaaaatcgaa
480
gtggtcgagg ccgctcaccc ggtgccggat gccgccggcc tggcgggtg
528

```

<210> 2154  
 <211> 96  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2154
Met Ser Val Asp Pro Gln His Leu Leu Arg Glu Leu Phe Ala Thr Ala

```



```

      1             5             10             15
Ile Asp Ala Ala His Pro Arg His Val Leu Glu Pro Tyr Leu Pro Ala
      20             25             30
Asp Arg Thr Gly Arg Val Ile Val Ile Gly Pro Gly Lys Thr Ala Pro
      35             40             45
Ala Met Ala Leu Val Val Glu Asn Gly Trp Gln Gly Glu Val Thr Gly
      50             55             60
Leu Val Val Thr Arg Tyr Gly His Gly Ala Pro Cys Lys Lys Ile Glu
      65             70             75             80
Val Val Glu Ala Ala His Pro Val Pro Asp Ala Ala Gly Leu Ala Val
      85             90             95

```

&lt;210&gt; 2155

&lt;211&gt; 297

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2155

```

gtgcaccgcc acggcacacc cgccatgccg cgccgctatt tcgaggccct gctgcaggag
60
ttcggccccg actgcgaggt gtcacogtc accgattcag agggcaaccc cctcagttcg
120
gtgctcagtt tctacttccg tgatgaagtg ctgccctact atgcggggcga cgccgtcgcg
180
gcgcgcgaac tggcgggccaa tgacttcaaa tactggggagc tgatgcgacg cgctgtgcg
240
cgcggcctca aggtgtttga ctacggccgc agcaagcagg gcacggggctc ctacgcn
297

```

&lt;210&gt; 2156

&lt;211&gt; 91

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2156

```

Met Pro Arg Arg Tyr Phe Glu Ala Leu Leu Gln Glu Phe Gly Pro Asp
      1             5             10             15
Cys Glu Val Leu Thr Val Thr Asp Ser Glu Gly Asn Pro Leu Ser Ser
      20             25             30
Val Leu Ser Phe Tyr Phe Arg Asp Glu Val Leu Pro Tyr Tyr Ala Gly
      35             40             45
Asp Ala Val Ala Ala Arg Glu Leu Ala Ala Asn Asp Phe Lys Tyr Trp
      50             55             60
Glu Leu Met Arg Arg Ala Cys Ala Arg Gly Leu Lys Val Phe Asp Tyr
      65             70             75             80
Gly Arg Ser Lys Gln Gly Thr Gly Ser Tyr Ala
      85             90

```

&lt;210&gt; 2157

&lt;211&gt; 711

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2157

naccgagata acgagggtcgt catcatctcc actgggtccc aaggtgagcc actttcggcc  
 60  
 cttagcaagga tcgccaaccg agagcaccga gacatcgagg tgggggaggg agataccgtt  
 120  
 ttgctggcat cctctctcat ccgggtaat gagaatgccg tctatcgagt gattaatggc  
 180  
 ctgacgaagc ttggcgccgc cgtggtacat aagggaacg ctttgggtcca cgtttccggc  
 240  
 catgccgcag ccggagagct gctgtacgag tataacatcg tgcggccacg cgctgtgatg  
 300  
 ccgattcatg gtgagggtgcg tcattctgtc gctaataccg atctggccaa agcaaccggt  
 360  
 gtcatgagga acaacgtggt gctgtcgag gacggcgggg ttattgacct tgttgacgga  
 420  
 gtaccgcgag ttgttggtcaa ggtcgatgcc tcgtacatcc ttgttgacgg atctgggggtg  
 480  
 ggggagctta ccgaggacac gctcactgat cgccgtatcc tcggtgagga gggattcttg  
 540  
 tcagtcgtca ccgtgggtcga caccgcctcg gcgtcagtgg tgtctcgccc ggcgatccag  
 600  
 gcgcgtggtt ttgccgaggg cgactcggtc ttgcgggaga tcaccgacca gatcgtcacc  
 660  
 gagctagaga aggcgatggc cgggtggtatg gacgataccc accggttgca a  
 711

<210> 2158

<211> 237

<212> PRT

<213> Homo sapiens

<400> 2158

Xaa	Arg	Asp	Asn	Glu	Val	Val	Ile	Ile	Ser	Thr	Gly	Ser	Gln	Gly	Glu
1				5					10					15	
Pro	Leu	Ser	Ala	Leu	Ala	Arg	Ile	Ala	Asn	Arg	Glu	His	Arg	Asp	Ile
			20					25					30		
Glu	Val	Gly	Glu	Gly	Asp	Thr	Val	Leu	Leu	Ala	Ser	Ser	Leu	Ile	Pro
		35					40					45			
Gly	Asn	Glu	Asn	Ala	Val	Tyr	Arg	Val	Ile	Asn	Gly	Leu	Thr	Lys	Leu
	50					55				60					
Gly	Ala	Ala	Val	Val	His	Lys	Gly	Asn	Ala	Leu	Val	His	Val	Ser	Gly
65					70					75				80	
His	Ala	Ala	Ala	Gly	Glu	Leu	Leu	Tyr	Ala	Tyr	Asn	Ile	Val	Arg	Pro
			85						90					95	
Arg	Ala	Val	Met	Pro	Ile	His	Gly	Glu	Val	Arg	His	Leu	Val	Ala	Asn
			100					105					110		
Ala	Asp	Leu	Ala	Lys	Ala	Thr	Gly	Val	Asp	Glu	Asn	Asn	Val	Val	Leu
		115					120					125			
Val	Glu	Asp	Gly	Gly	Val	Ile	Asp	Leu	Val	Asp	Gly	Val	Pro	Arg	Val
		130				135						140			
Val	Gly	Lys	Val	Asp	Ala	Ser	Tyr	Ile	Leu	Val	Asp	Gly	Ser	Gly	Val
145					150					155				160	
Gly	Glu	Leu	Thr	Glu	Asp	Thr	Leu	Thr	Asp	Arg	Arg	Ile	Leu	Gly	Glu
			165						170					175	
Glu	Gly	Phe	Leu	Ser	Val	Val	Thr	Val	Val	Asp	Thr	Arg	Ser	Ala	Ser

```

          180          185          190
Val Val Ser Arg Pro Ala Ile Gln Ala Arg Gly Phe Ala Glu Gly Asp
          195          200          205
Ser Val Phe Ala Glu Ile Thr Asp Gln Ile Val Thr Glu Leu Glu Lys
          210          215          220
Ala Met Ala Gly Gly Met Asp Asp Thr His Arg Leu Gln
          225          230          235

```

<210> 2159  
 <211> 322  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2159
tcgcgagcac actccagcct ctggagagac gacaacgcgt gaaggggcac cagcttgcg
60
ggcagcagct ccaggggcgg cctgggaggg ctttgtgcag aagaagcctg tttccttcta
120
cctgttttga aaagttgtct ctgcagatgg tgggtgagag ttcgctgccca gggccactgt
180
cttccctgcc ctgcggacac ttcttcccca ccttcctaaa gctgtggggag acctggagcc
240
gtggagcatc aatggctctt tgactcagga atcttaaaaa atcacaccct ggggctacca
300
tgggggcctt ctggttctcc tt
322

```

<210> 2160  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2160
Met Val Ala Pro Gly Cys Asp Phe Leu Arg Phe Leu Ser Gln Arg Ala
  1           5           10           15
Ile Asp Ala Pro Arg Leu Gln Val Ser His Ser Phe Arg Lys Val Gly
          20          25          30
Lys Lys Cys Pro Gln Gly Arg Glu Asp Ser Gly Pro Gly Ser Glu Leu
          35          40          45
Ser Pro Thr Ile Cys Arg Asp Asn Phe Ser Lys Gln Val Glu Gly Asn
          50          55          60
Arg Leu Leu Leu His Lys Ala Leu Pro Gly Arg Pro Trp Ser Cys Cys
          65          70          75          80
Pro Ala Ser Trp Cys Pro Phe Thr Arg Cys Arg Leu Ser Arg Gly Trp
          85          90          95
Ser Val Leu Ala
          100

```

<210> 2161  
 <211> 1070  
 <212> DNA  
 <213> Homo sapiens

<400> 2161

tcttagggga aggggaaggct tatctgaaga gtagacctct ggttttgaat gagggagaca  
 60  
 gtggggatat gaggggagga aacctcaaaa agaatatgta tccatcacta tgaaaggtta  
 120  
 ggctatacag gggaagcctc caaagggaaa tctggaaaaa tgttctgaga gggacattaa  
 180  
 ggatgtactc agaaattaag aaaacatatt aggacttgcc aaaagtgaga gaagcaactg  
 240  
 aggagactta tatgcaaaaa tcgcaaagaa ggagagaaca aaagatggag gttggatgct  
 300  
 aaatagggaa agagaacgcy tgaatgaggt agggggcaga acatgcagtg cagaaaaaca  
 360  
 acagatatgg aagggcatta aagagggcta aatgggaata ttaggaaatg agagtggga  
 420  
 atttgtcaga gttgtgtatt aacaaggaga gggttaaggta agaaggtggc aaagtaagag  
 480  
 ccagggcata aggttttgct gtccaggaag ctttgttgga aaaatgttag aagtaatggg  
 540  
 tttggtcagt atggtgagag gtgagagagg ctaaatggga tgggcataaa gggcaggcca  
 600  
 gtggcaagaa tcctatgaaa gtgtaggcag atctgagagc acagacaaat acagtggaga  
 660  
 atgtggcaca gggcagaggg cagtgggctg agcagcgagt gcccatgggg aggggagtat  
 720  
 ccagaagaac ccattgagtc cctaagaatg acacacaggt gacagctgaa agaaggaggg  
 780  
 acacagaaga tatagcagca tgattctctg gggcaaaatg aggaagaaag gaatggaaga  
 840  
 agaaagtga gggttcctgc tgatgtgagg ggatgactgg aggaaaggca ggtattgact  
 900  
 ggggggtaaa ggaaccattc ttggatcaag gttatgatgg aataagaagg aagagagagc  
 960  
 tggctagctg agtaaaggac catcgtataa aacagacaaa agttaagact agatggagtg  
 1020  
 gcaactaggc agatcagatg tattttttaa aggggaaact gctaagatct  
 1070

<210> 2162

<211> 145

<212> PRT

<213> Homo sapiens

<400> 2162

Met	Val	Leu	Tyr	Ser	Ala	Ser	Gln	Leu	Ser	Leu	Pro	Ser	Tyr	Ser	Ile
1				5				10					15		
Ile	Thr	Leu	Ile	Gln	Glu	Trp	Phe	Leu	Tyr	Pro	Pro	Val	Asn	Thr	Cys
			20				25					30			
Leu	Ser	Ser	Ser	His	Pro	Leu	Thr	Ser	Ala	Gly	Thr	Leu	His	Phe	Leu
			35				40					45			
Leu	Pro	Phe	Leu	Ser	Ser	Ser	Phe	Cys	Pro	Arg	Glu	Ser	Cys	Cys	Tyr
			50				55				60				
Ile	Phe	Cys	Val	Pro	Pro	Ser	Phe	Ser	Cys	His	Leu	Cys	Val	Ile	Leu
65					70				75					80	
Arg	Asp	Ser	Met	Gly	Ser	Ser	Gly	Tyr	Ser	Pro	Pro	His	Gly	His	Ser

85 90 95  
 Leu Leu Ser Pro Leu Pro Ser Ala Leu Cys His Ile Leu His Cys Ile  
 100 105 110  
 Cys Leu Cys Ser Gln Ile Cys Leu His Phe His Arg Ile Leu Ala Thr  
 115 120 125  
 Gly Leu Pro Phe Met Pro Ile Pro Phe Ser Leu Ser His Leu Ser Pro  
 130 135 140  
 Tyr  
 145

&lt;210&gt; 2163

&lt;211&gt; 657

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2163

tattttaaattc ttataaaaa aggtaggagg atcaggactt cgacccccctt aaaacgcggc  
 60  
 ggccctccctc caatccacct ccaattccta caccaccccc gctctcccc ccccccttt  
 120  
 tgggtccggg ttggaagggt ggggtgaaatg ggaaccgaat accaatttca cccgggaacc  
 180  
 agtaatgccc atgataaccg ccaagtggg accgaagttg ggatccataa gtacggggcg  
 240  
 ccagtggggg ggaattgggt taagccccct cccagccttt ctccgaccgc gtgctccgtc  
 300  
 agacatgccca agaggctctc tctccaggag agccacctgt gaaacccacc cggcatgctc  
 360  
 ctcccaccac tgtgcacaga cgagtgcctg ggctccagag agggagggag ctgaaggcct  
 420  
 cagacaggag tccgtcccggt ccagtcccat catccaaga aacatccggc cggactccct  
 480  
 gcagctccat ggctcaacaa ggtgcggatg cctgctggac ctggctgctt tccatccaac  
 540  
 ttgatccct tcccaagag gaagagtgtc acctagggac aagtgtggtg cgcacaggca  
 600  
 tgcagcctgg tctcttgctc aggcggcttg cgcagattcc tagaggaatc tgcagcg  
 657

&lt;210&gt; 2164

&lt;211&gt; 152

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2164

Met Pro Met Ile Thr Ala Lys Leu Gly Pro Lys Leu Gly Ser Ile Ser  
 1 5 10 15  
 Thr Gly Gly Gln Trp Gly Gly Ile Gly Leu Ser Pro Leu Pro Ala Phe  
 20 25 30  
 Leu Arg Pro Arg Ala Pro Ser Asp Met Pro Arg Gly Ser Leu Ser Arg  
 35 40 45  
 Arg Ala Thr Cys Glu Thr His Pro Ala Cys Ser Ser His His Cys Ala  
 50 55 60  
 Gln Thr Ser Ala Trp Ala Pro Glu Arg Glu Gly Ala Glu Gly Leu Arg

```

65          70          75          80
Gln Glu Ser Val Pro Ser Ser Pro Ile Ile Pro Arg Asn Ile Arg Pro
          85          90          95
Asp Ser Leu Gln Leu His Gly Ser Thr Arg Cys Gly Cys Leu Leu Asp
          100          105          110
Leu Ala Ala Phe His Pro Thr Leu Ile Pro Ser Pro Arg Gly Arg Val
          115          120          125
Leu Pro Arg Asp Lys Cys Gly Ala His Arg His Ala Ala Trp Ser Leu
          130          135          140
Ala Gln Ala Ala Cys Ala Asp Ser
145          150

<210> 2165
<211> 962
<212> DNA
<213> Homo sapiens

<400> 2165
nctttctcat cgacagcgac gcacaaccgg cgacatcacc ggtgacgggt caaggtggca
60
gcccgagggc ccgccgtgaa cttattgtgt cgtcttatgg aagaaaagtc actcggaagt
120
accgtaaatc accccagcgc ctcattcccc gaattctgttc gccattctgct gtgcgccctg
180
cgcttaaggc atcacccac tagactgacc gaagtctcgc cgaggagggc tagggaggct
240
taggtggcca ggaatgacat cgggacgacg tctacgcgtc gaataggcag cggacgtacg
300
tcgagtaccg gccgtacggt ggtgtcttct gaccgcacac gcagagctat cgctaaaaga
360
ttgatggccc gcacctcagc tatgacgacg gccactctag aggaaatggg tcgtcgacac
420
tcctgggtcc gtgatctgtc agccgaagaa agatcgtgga tctcgatcgt ggctcgctca
480
ggtattgacg gcttcgtcca gtggtttgct gacgatgacg ccgagcccta ctccccacc
540
gacgtcttcg acgtggcgcc ccggtccatg acccgcaaga tctccttgca ccagacagtc
600
gagctcgtcc gcaccacgat tgacgtcgtt gaggcacaaa ttgagaccga aatgccacgc
660
ggtgatcgcc aagtgtcgtc cactgccatc gttcactact ccgcgaggt ggccttcgcc
720
gccgccgagg ttacgcgcgc agccgccgaa cgtcgcggta cctgggatga acgtctggaa
780
tccctcgtcg ttgatgccgt cgtgcgagcc gacgccgatg aacagctcat ctgcgagct
840
tctactctcg gctggcgccc gggcatcaac ctctgcgtcg ttgtcgggcg ggcgccgacg
900
accgagcatg aactccacgt gctgcgacgt gatggagaac gcatgcagat gacggtgcta
960
gc
962

<210> 2166

```

<211> 239  
 <212> PRT  
 <213> Homo sapiens

<400> 2166  
 Val Ala Arg Asn Asp Ile Gly Thr Thr Ser Thr Arg Arg Ile Gly Ser  
 1 5 10 15  
 Gly Arg Thr Ser Ser Thr Gly Arg Thr Val Val Ser Ser Asp Arg Thr  
 20 25 30  
 Arg Arg Ala Ile Ala Lys Arg Leu Met Ala Arg Thr Ser Ala Met Thr  
 35 40 45  
 Thr Ala Thr Leu Glu Glu Met Gly Arg Arg His Ser Trp Phe Arg Asp  
 50 55 60  
 Leu Ser Ala Glu Glu Arg Ser Trp Ile Ser Ile Val Ala Arg Ser Gly  
 65 70 75 80  
 Ile Asp Gly Phe Val Gln Trp Phe Ala Asp Asp Ala Glu Pro Tyr  
 85 90 95  
 Ser Pro Thr Asp Val Phe Asp Val Ala Pro Arg Ser Met Thr Arg Lys  
 100 105 110  
 Ile Ser Leu His Gln Thr Val Glu Leu Val Arg Thr Thr Ile Asp Val  
 115 120 125  
 Val Glu Ala Gln Ile Glu Thr Glu Met Pro Arg Gly Asp Arg Gln Val  
 130 135 140  
 Leu Arg Thr Ala Ile Val His Tyr Ser Arg Glu Val Ala Phe Ala Ala  
 145 150 155 160  
 Ala Glu Val Tyr Ala Arg Ala Ala Glu Arg Arg Gly Thr Trp Asp Glu  
 165 170 175  
 Arg Leu Glu Ser Leu Val Val Asp Ala Val Val Arg Ala Asp Ala Asp  
 180 185 190  
 Glu Gln Leu Ile Ser Arg Ala Ser Thr Leu Gly Trp Arg Pro Gly Ile  
 195 200 205  
 Asn Leu Cys Val Val Val Gly Arg Ala Pro Thr Thr Glu His Glu Leu  
 210 215 220  
 His Val Leu Arg Arg Asp Gly Glu Arg Met Gln Met Thr Val Leu  
 225 230 235

<210> 2167  
 <211> 325  
 <212> DNA  
 <213> Homo sapiens

<400> 2167  
 accggtgcag tttgtgaggg gttggtgacg cccgatcggg aggttcacgc cgtcacggcg  
 60  
 catccacatt atcccgaactg gaagatctcg ccagggttacg gacagtgggc gcgtagcgaa  
 120  
 cagatcgaca gtgtgactgt gacgcgagtc agacacttcg tcccgcggcg tcccacggcg  
 180  
 attcttcgag cgggtgtctga ggtgacgttc gggttgcgtc tctgcgccgt ccgttggcga  
 240  
 agcaccgcgg cgattgtggc tgtgtcgccg gccttgctct cgacgcgggc gcgcgggtcg  
 300  
 tgcgctgac tcccacagca taccc  
 325

<210> 2168  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

<400> 2168  
 Thr Gly Ala Val Cys Glu Gly Leu Val Thr Pro Asp Arg Glu Val His  
 1 5 10 15  
 Ala Val Thr Ala His Pro His Tyr Pro Asp Trp Lys Ile Ser Pro Gly  
 20 25 30  
 Tyr Gly Gln Trp Ser Arg Ser Glu Gln Ile Asp Ser Val Thr Val Thr  
 35 40 45  
 Arg Val Arg His Phe Val Pro Arg Arg Pro Thr Ala Ile Leu Arg Ala  
 50 55 60  
 Val Ser Glu Val Thr Phe Gly Leu Arg Leu Cys Ala Val Arg Trp Arg  
 65 70 75 80  
 Ser Thr Ala Ala Ile Val Ala Val Ser Pro Ala Leu Leu Ser Thr Arg  
 85 90 95  
 Ser Arg Gly Ser Cys Ala Asp Leu Pro Gln His Thr  
 100 105

<210> 2169  
 <211> 309  
 <212> DNA  
 <213> Homo sapiens

<400> 2169  
 gaggacgcct acgtgctcat caccagggc aagatctcgg cgatcgccga cgtcctgccg  
 60  
 atcctggaga aggtcgtcaa ggccggcaag ccgctgctcg tcatcgccga ggacatcgac  
 120  
 ggggaggccc tgtccaccct cgtcgtcaat aagatccgcg gtaccttcag ctcggtggca  
 180  
 gtcaaggcgc ccggcttcgg tgaccgccgc aaggcaatgc tgcaggacat cgccaccctc  
 240  
 accgggtggtc aggtcgtcgc tcccagggtt gggctcaagc tcgaccaggt gggcctcgag  
 300  
 gttcagggc  
 309

<210> 2170  
 <211> 103  
 <212> PRT  
 <213> Homo sapiens

<400> 2170  
 Glu Asp Ala Tyr Val Leu Ile Thr Gln Gly Lys Ile Ser Ala Ile Ala  
 1 5 10 15  
 Asp Val Leu Pro Ile Leu Glu Lys Val Val Lys Ala Gly Lys Pro Leu  
 20 25 30  
 Leu Val Ile Ala Glu Asp Ile Asp Gly Glu Ala Leu Ser Thr Leu Val  
 35 40 45  
 Val Asn Lys Ile Arg Gly Thr Phe Ser Ser Val Ala Val Lys Ala Pro



```

      50              55              60
Gly Phe Gly Asp Arg Arg Lys Ala Met Leu Gln Asp Ile Ala Thr Leu
65              70              75              80
Thr Gly Gly Gln Val Val Ala Pro Glu Val Gly Leu Lys Leu Asp Gln
      85              90              95
Val Gly Leu Glu Val Gln Gly
      100

```

<210> 2171  
 <211> 518  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2171
cgcgtaatgt gtattaaggt ccttggtggc tcgcatcgcc gttatgcagc aatcggtgat
60
atcatcaaag ttctagtgaa ggaagcaatt cctcgcggaa aaattaaaaa aggtaatggt
120
cattcagctg tggtagtgcg taccagaaaa ggtgtacgtc gtcccgatgg ttctgttatt
180
cgttttgatc gcaacgcagc gggttatcttg aatgcaaaca accagccagt cggtacacgt
240
atctttggcc ctgtaacccg tgagcttcga aatgaaaatt tcatgaagat tgtttcactg
300
gcgcagaag tactgtaagg aaccgaaaat ggcagcaaaa ataaaacgtg acgatgaagt
360
aattgttatt gccggtaaa ataaaggtaa aactgggaaa gtttctcaag ttttaactaa
420
cggtaagta attattgaag gtgtaaatgt tcaaaagaaa caccaaaaac caaacctca
480
agcgggcgtg gaaggcggaa tcattgaaca gaatgcat
518

```

<210> 2172  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2172
Arg Val Met Cys Ile Lys Val Leu Gly Gly Ser His Arg Arg Tyr Ala
1              5              10              15
Ala Ile Gly Asp Ile Ile Lys Val Ser Val Lys Glu Ala Ile Pro Arg
20              25              30
Gly Lys Ile Lys Lys Gly Asn Val His Ser Ala Val Val Val Arg Thr
35              40              45
Arg Lys Gly Val Arg Arg Pro Asp Gly Ser Val Ile Arg Phe Asp Arg
50              55              60
Asn Ala Ala Val Ile Leu Asn Ala Asn Asn Gln Pro Val Gly Thr Arg
65              70              75              80
Ile Phe Gly Pro Val Thr Arg Glu Leu Arg Asn Glu Asn Phe Met Lys
85              90              95
Ile Val Ser Leu Ala Pro Glu Val Leu
100              105

```

<210> 2173  
 <211> 475  
 <212> DNA  
 <213> Homo sapiens

<400> 2173  
 nntggggaag aaatgccggt gcatgcactt tgtgcagcat taggtgcagg ggtgatgcag  
 60  
 cgggcgcggtg ccttttgctg cggggtttctg agcattcatc tgggtgcatgc attttcgcac  
 120  
 gcatttcttg taccctcgtc atcgctttct ccccatgcac acacattatc gcctttgcac  
 180  
 ccgcagggac gcatggaata cctcgtgaaa tggaagggat ggtcgcagaa gtacagcaca  
 240  
 tgggaaccgg aggaaaacat cctggatgct cgcttgctcg cagcctttga ggaaagggaa  
 300  
 agagagatgg agctctatgg ccccaaaaag cgtggacca agcccaaac ctctctctc  
 360  
 aaagcgagg ccaaggcaaa ggccaaaact tacgagtttc gaagtgaatc agccaggggc  
 420  
 atccggatcc cctaccctgg ccgctcgccc caggacctgg cctccacttc ccggg  
 475

<210> 2174  
 <211> 158  
 <212> PRT  
 <213> Homo sapiens

<400> 2174  
 Xaa Gly Glu Glu Met Pro Val His Ala Leu Cys Ala Ala Leu Gly Ala  
 1 5 10 15  
 Gly Val Met Gln Arg Ala Arg Ala Phe Cys Gly Gly Val Ser Ser Ile  
 20 25 30  
 His Leu Val His Ala Phe Ser His Ala Phe Leu Val Ser Ser Ser Cys  
 35 40 45  
 Val Ser Pro His Ala His Thr Leu Ser Pro Leu His Pro Gln Gly Arg  
 50 55 60  
 Met Glu Tyr Leu Val Lys Trp Lys Gly Trp Ser Gln Lys Tyr Ser Thr  
 65 70 75 80  
 Trp Glu Pro Glu Glu Asn Ile Leu Asp Ala Arg Leu Leu Ala Ala Phe  
 85 90 95  
 Glu Glu Arg Glu Arg Glu Met Glu Leu Tyr Gly Pro Lys Lys Arg Gly  
 100 105 110  
 Pro Lys Pro Lys Thr Phe Leu Leu Lys Ala Gln Ala Lys Ala Lys Ala  
 115 120 125  
 Lys Thr Tyr Glu Phe Arg Ser Asp Ser Ala Arg Gly Ile Arg Ile Pro  
 130 135 140  
 Tyr Pro Gly Arg Ser Pro Gln Asp Leu Ala Ser Thr Ser Arg  
 145 150 155

<210> 2175  
 <211> 462  
 <212> DNA  
 <213> Homo sapiens

<400> 2175  
 cgcgacaccc tctttggtgg ggccttcct tctccgaatt cggaaccct ccagactctg  
 60  
 gccaggagg ttgtcgagcg tggagccgat atcggcattg ccactgatgg tgacgcagac  
 120  
 cgctcggta tcattgatga ccaggggcat ttcttgcatc ccaaccagat cctcgtattg  
 180  
 ctgtacacct accttctgga ggacaaggga tggcaggtgc cctgcgtgcg taacctcgcg  
 240  
 acgacccacc tgcttgaccg tgcgcgcgag gccacgggc agacctgtta cgaggtagcg  
 300  
 gtcggattta agtgggtgtc gtccaagatg gccgagacca acgccgtcat cgggtgtgag  
 360  
 tcctccggtg gtttgaccgt ccaggggcat attgcaggca aggatggtgt ctatgctggc  
 420  
 accctgctgg tggaaatgat cgccaagcgg ggtaagaagc tt  
 462

<210> 2176  
 <211> 154  
 <212> PRT  
 <213> Homo sapiens

<400> 2176  
 Arg Asp Thr Leu Phe Gly Gly Arg Leu Pro Ser Pro Asn Ser Arg Thr  
 1 5 10 15  
 Leu Gln Thr Leu Ala Gln Glu Val Val Glu Arg Gly Ala Asp Ile Gly  
 20 25 30  
 Ile Ala Thr Asp Gly Asp Ala Asp Arg Leu Gly Ile Ile Asp Asp Gln  
 35 40 45  
 Gly His Phe Leu His Pro Asn Gln Ile Leu Val Leu Leu Tyr Thr Tyr  
 50 55 60  
 Leu Leu Glu Asp Lys Gly Trp Gln Val Pro Cys Val Arg Asn Leu Ala  
 65 70 75 80  
 Thr Thr His Leu Leu Asp Arg Val Ala Glu Ala His Gly Gln Thr Cys  
 85 90 95  
 Tyr Glu Val Pro Val Gly Phe Lys Trp Val Ser Ser Lys Met Ala Glu  
 100 105 110  
 Thr Asn Ala Val Ile Gly Gly Glu Ser Ser Gly Gly Leu Thr Val Gln  
 115 120 125  
 Gly His Ile Ala Gly Lys Asp Gly Val Tyr Ala Gly Thr Leu Leu Val  
 130 135 140  
 Glu Met Ile Ala Lys Arg Gly Lys Lys Leu  
 145 150

<210> 2177  
 <211> 478  
 <212> DNA  
 <213> Homo sapiens

<400> 2177  
 ctcgagaatc atgacggcga cgacgtgact atctccaccc gtgtgcctcg tgacggcggg  
 60

accttgact cgattgtcgg cgtgctggcc ggggcatcct ggtatcagcg ggagatccac  
 120  
 gacttttttg gtgtgaggtt tgcggccct ggggcagatg atcgtgccct ccttgccac  
 180  
 gatgcaccga aaccgcccct gcgcaaggaa gctgtgttgg cgcagcagc tgacaccgtg  
 240  
 tggccgggtg cggctgacca ggtggctcg aagtcgcga gtcgacgtct gccggtcggc  
 300  
 gttcctgacc ctgagacgtg gcggcgtatc aaagacggcg aggatattcc ggatgccgag  
 360  
 gtcacgcgg ccatgtctgg ccggcggcgg cgtacagctg cccgtcgaat ggcaagcacg  
 420  
 gcgtcaggca ggcaggcatg agacattcga ctatcaacct tgacgtcgac gcgtgcac  
 478

<210> 2178

<211> 146

<212> PRT

<213> Homo sapiens

<400> 2178

Leu Glu Asn His Asp Gly Asp Asp Val Thr Ile Ser Thr Arg Val Pro  
 1 5 10 15  
 Arg Asp Gly Gly Thr Leu Asp Ser Ile Val Gly Val Leu Ala Gly Ala  
 20 25 30  
 Ser Trp Tyr Gln Arg Glu Ile His Asp Phe Phe Gly Val Arg Phe Val  
 35 40 45  
 Gly Pro Gly Ala Asp Asp Arg Ala Leu Leu Val His Asp Ala Pro Lys  
 50 55 60  
 Pro Pro Leu Arg Lys Glu Ala Val Leu Ala Gln Arg Ala Asp Thr Val  
 65 70 75 80  
 Trp Pro Gly Ala Ala Asp Gln Ala Gly Ser Lys Ser Ala Ser Arg Arg  
 85 90 95  
 Leu Pro Val Gly Val Pro Asp Pro Glu Thr Trp Arg Arg Ile Lys Asp  
 100 105 110  
 Gly Glu Asp Ile Pro Asp Ala Glu Val Ile Ala Ala Met Ser Gly Arg  
 115 120 125  
 Arg Pro Arg Ser Ala Ala Arg Arg Met Ala Ser Thr Ala Ser Gly Arg  
 130 135 140  
 Gln Ala  
 145

<210> 2179

<211> 296

<212> DNA

<213> Homo sapiens

<400> 2179

gtgcacttcc gaggggacgt cgagcgtcgc attaacgggg ccggcgcggt gggcgcacac  
 60  
 aagacgtcga tgctgcagga tctggacngc gaccgcgcga tggagatcga cccgtcgtc  
 120  
 tccgtcgttc aggagatggg acgcctggcc aacgtgccga cggccacgct cgatgtcgtg  
 180

ctccactga tcaagcaacg tgaattcatg acgaagccgg atgccgtggc ggccgcgcag  
 240  
 gaacgtctgg ctaaagcggc ataaaccagc cgccgaaacc agcggcataa cgcggn  
 296

<210> 2180  
 <211> 87  
 <212> PRT  
 <213> Homo sapiens

<400> 2180  
 Val His Phe Arg Val Asp Val Glu Arg Arg Ile Asn Gly Ala Gly Ala  
 1 5 10 15  
 Val Gly Ala His Lys Thr Ser Met Leu Gln Asp Leu Asp Xaa Asp Arg  
 20 25 30  
 Ala Met Glu Ile Asp Pro Leu Val Ser Val Val Gln Glu Met Gly Arg  
 35 40 45  
 Leu Ala Asn Val Pro Thr Pro Thr Leu Asp Val Val Leu Pro Leu Ile  
 50 55 60  
 Lys Gln Arg Glu Phe Met Thr Lys Pro Asp Ala Val Ala Ala Ala Gln  
 65 70 75 80  
 Glu Arg Leu Ala Lys Ala Ala  
 85

<210> 2181  
 <211> 387  
 <212> DNA  
 <213> Homo sapiens

<400> 2181  
 ngcgcgcgg gatggatcat agtctggctc gatgcatcac gtgcgcgcat gcgcgcgctg  
 60  
 tgcattccc acggcatgat cgcggcactc gaccgtaccg gcaaggcgca aacgcacctc  
 120  
 acgctggcat cgccggaagc ggggtgctgc agcgaactga acgtgcgcga cgggtgcgatg  
 180  
 gtcgcgccgg ggcagacgct cgcgaagatt tcgggcctct cgaagctctg gctgatcgtc  
 240  
 gagattccgg aagcgctcgc gctcgatgcg cgtccgggca tgaccgtcga cgcgacgttc  
 300  
 tcgggcgatc cgacgcagca ttccaccggg cgtatccgag agatcctgcc gggcatcacc  
 360  
 accagtagcc gcacgcttca ggcgcgc  
 387

<210> 2182  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

<400> 2182  
 Xaa Ala Pro Gly Trp Ile Ile Val Trp Leu Asp Ala Ser Arg Ala Arg  
 1 5 10 15  
 Met Arg Ala Leu Ser Ile Pro Asp Gly Met Ile Ala Ala Leu Asp Arg

```

      20      25      30
Thr Gly Lys Ala Gln Thr His Leu Thr Leu Ala Ser Pro Glu Ala Gly
      35      40      45
Val Val Ser Glu Leu Asn Val Arg Asp Gly Ala Met Val Ala Pro Gly
      50      55      60
Gln Thr Leu Ala Lys Ile Ser Gly Leu Ser Lys Leu Trp Leu Ile Val
      65      70      75      80
Glu Ile Pro Glu Ala Leu Ala Leu Asp Ala Arg Pro Gly Met Thr Val
      85      90      95
Asp Ala Thr Phe Ser Gly Asp Pro Thr Gln His Phe Thr Gly Arg Ile
      100      105      110
Arg Glu Ile Leu Pro Gly Ile Thr Thr Ser Ser Arg Thr Leu Gln Ala
      115      120      125
Arg

```

<210> 2183  
 <211> 310  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2183
aagcttgaaa aacaaatttg tgcacagtct gataacccaa aaatgactga tggattggct
60
ctgcattttc caagcaggga ggggtcgggc atggagaatg aaacattctg agaaaagact
120
taaatgtgga aacttttggt tcaagagggt attctaggag atacaagaaa tatctcctgg
180
gggcatccaa agggaataac actgtaatct tgagtgatgt atggttccat tgcccaggga
240
atagggatga aaaccataaa ctcctttggg tgggtattaa cttatcantc aaagttacca
300
tanataatgg
310

```

<210> 2184  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2184
Met Val Thr Leu Xaa Asp Lys Leu Ile Pro Thr Gln Arg Ser Leu Trp
1      5      10      15
Phe Ser Ser Leu Phe Leu Gly Gln Trp Asn His Thr Ser Leu Lys Ile
20      25      30
Thr Val Leu Phe Pro Leu Asp Ala Pro Arg Arg Tyr Phe Leu Tyr Leu
35      40      45
Leu Glu Tyr Pro Leu Glu Pro Lys Val Ser Thr Phe Lys Ser Phe Leu
50      55      60
Arg Met Phe His Ser Pro Cys Pro Thr Pro Pro Cys Leu Glu Asn Ala
65      70      75      80
Glu Pro Ile His Gln Ser Phe Leu Gly Tyr Gln Thr Val His Lys Phe
85      90      95
Val Phe Gln Ala

```

100

&lt;210&gt; 2185

&lt;211&gt; 723

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2185

```

ngaatatcca tgcagcagct cgctcgacaat ttgacgggtg ccatccctga cgatcttgac
60
tctcttgatga ccctgcccggtg agtcgggtcgt aagaccgcca atgttggttt aggtaatgcc
120
ttcggcatcc ccggaatcac ccgggacacc cagtcacatgc gggatatctcg acgtctgggc
180
tggaccgatg cgactacccc cgccaagggtg gaaaccgacc tggctgagct ttttgaccgg
240
tctgaatggg tgatgttggt tcaccgcctc atctgggacg ggcggcggtg ctgtcactcg
300
cggcgctcctg cctcggggggt atgcccgggtt gccgagtggt gcccgctcctt cggggaaggc
360
ccaacggatc ccgaggaggc gcaccagtta gtccgggagc cgcgtcgatg agggggatga
420
acgttttcgg cgcggtgatg gccgccttga tgtttgctgg ctgcggggga gatgcgggca
480
tagctcatca gcgtgaaaat gccggaatac cgggggtgctc gcatttgcgg tcggggccga
540
ttgcgaaaag ttccggggcg gccacagagg gccggcccat gcccgatcac ggcttgcaat
600
gccttggtga ggggcccagc atctccatgt ctccggcgac atcgaggggc gtgaccgtcg
660
tgacgatctg ggcgtcgtgg tgctgacatc gtcgtagtga ggctccgctc attgcgaacg
720
cgt
723

```

&lt;210&gt; 2186

&lt;211&gt; 136

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2186

```

Xaa Ile Ser Met Gln Gln Leu Val Asp Asn Phe Asp Gly Ala Ile Pro
1           5           10          15
Asp Asp Leu Asp Ser Leu Val Thr Leu Pro Gly Val Gly Arg Lys Thr
20          25          30
Ala Asn Val Val Leu Gly Asn Ala Phe Gly Ile Pro Gly Ile Thr Pro
35          40          45
Asp Thr His Val Met Arg Val Ser Arg Arg Leu Gly Trp Thr Asp Ala
50          55          60
Thr Thr Pro Ala Lys Val Glu Thr Asp Leu Ala Glu Leu Phe Asp Pro
65          70          75          80
Ser Glu Trp Val Met Leu Cys His Arg Leu Ile Trp His Gly Arg Arg
85          90          95
Arg Cys His Ser Arg Arg Pro Ala Cys Gly Val Cys Pro Val Ala Glu

```

1617

	100		105		110										
Trp	Cys	Pro	Ser	Phe	Gly	Glu	Gly	Pro	Thr	Asp	Pro	Glu	Glu	Ala	Ala
	115						120					125			
Thr	Leu	Val	Arg	Glu	Pro	Arg	Arg								
	130						135								

<210> 2187  
 <211> 342  
 <212> DNA  
 <213> Homo sapiens

<400> 2187  
 nnacgcgtga aggatgcgcc ccggtcgacc ggccatccgt cttgcctcgc aggcattccag  
 60  
 cccgccatat gctgcaaccg caacaccgct ttgcgcgcgc atggcatctc cactccggat  
 120  
 cgcctcgatc caccgaggct atcggcgcca aagaagttgc cggggcaaaa tcccggcgag  
 180  
 gaaagcccca tggagtggaa gacgctgctc aacgacaccg gcttcggagg ggtcgccagc  
 240  
 ctcgatggga cgcgcggacg gtcggagtgc cagaaggacc acgaccggat catcttctcc  
 300  
 gaagccttcc gcaagctggg ccgcaagacc caggtgcacc cg  
 342

<210> 2188  
 <211> 51  
 <212> PRT  
 <213> Homo sapiens

Met	Glu	Trp	Lys	Thr	Leu	Leu	Asn	Asp	Thr	Arg	Phe	Gly	Gly	Val	Ala
1			5						10				15		
Ser	Leu	Asp	Gly	Thr	Arg	Gly	Arg	Ser	Glu	Phe	Gln	Lys	Asp	His	Asp
		20					25					30			
Arg	Ile	Ile	Phe	Ser	Glu	Ala	Phe	Arg	Lys	Leu	Gly	Arg	Lys	Thr	Gln
	35					40					45				
Val	His	Pro													
	50														

<210> 2189  
 <211> 1412  
 <212> DNA  
 <213> Homo sapiens

<400> 2189  
 ntcgcttcat ggtgcgcaat tacgacaacg ccaagtctca gaatgccgag gcttacaccg  
 60  
 cgtttcttcca cgcgatgcta gatgccgggg tcaacctgcc gccatcgtgc tttgaggcct  
 120  
 ggttctcttc ggacgctcac gacgacgaag ctttcgaggt tttccgcgcc gccctgccga  
 180  
 gggctgcccc ggccgctgcc caggtgatca gtgcctgaca ccgggctgac ttgcaggtc  
 240



atcgaggcaa tctgtgcctg gttcgacgcc aacggacgcg atctgccgtg gcgccgaccc  
 300  
 ggcacctccg cgtggggcgt gcttgtagc gaggtcatga gccaacagac cccgatgtcc  
 360  
 cgggtgatcg ggccgtggca cgagtggatg aaccgctggc ccaccctga tgatttgccg  
 420  
 gaggaggact ctggggaagc ggttgccgcg tgggggcgcc tgggttacc gcgtcgggcc  
 480  
 ttacgcctgc attcctgtgc cgtcacgac gccaccgagc acgacggggg tgtgccaac  
 540  
 agtgacgacg agctcgtgc cctcccgggt attggcgact acaccgcgag cgagtcgtc  
 600  
 tcttttgcgt ttggggccg cgccacagt cttgacacca atgtacgtcg cctcatcgct  
 660  
 agagcagagt ctgggatcgc aaactgtcca acctcgggtga cgagggtga gcgggtagt  
 720  
 gccgacgcgt tggttcccca cgaagacgtc cgagcggcca agtgggcggt ggcgtcgatg  
 780  
 gaattggggg cactggtatg cacggcgccg tctccgcagt gtgaggtctg cccgatccg  
 840  
 gatggctgca ggtgggtgat cgacggtagg ccggacaatg ccccgccccg tcgaggacag  
 900  
 ccatggaagg gcacggatcg ccagtgccgc ggcgtgatta tggacgtggt gcgcaacagc  
 960  
 cctcacgggg tgaagggtcca gatggctctt tccgcctggc ccgagctcga tcaggcatca  
 1020  
 aggtgcctgg aatccttact cgatgacggt ttagtgcacc gacgaggtaa ccttattagc  
 1080  
 ctgtgacctg agaaattctt ggccccgacc acccaaacag accgagtcca gcagtgatgc  
 1140  
 cgtggggtta tccttagagg cggctcctcaa attggatcag ccaaaccacg tcaccgatca  
 1200  
 agacaccatg agcacaacac ccaaacagcc gcgcacggcg acagctgccc gacgccgaca  
 1260  
 cattgtcgac catctgcgtt ctttggggca ctgggagtc atcggagatc tttaccaact  
 1320  
 gttcgggtgc tctacatcga cgattcgccg cgatgtcgat gccctctcgg atgaatccaa  
 1380  
 gatctggaag atttccgggg gagacgtcat ga  
 1412

<210> 2190

<211> 292

<212> PRT

<213> Homo sapiens

<400> 2190

Ser	Val	Pro	Asp	Thr	Gly	Leu	Thr	Ser	Gln	Val	Ile	Glu	Ala	Ile	Cys
1				5				10					15		
Ala	Trp	Phe	Asp	Ala	Asn	Gly	Arg	Asp	Leu	Pro	Trp	Arg	Arg	Pro	Gly
			20					25					30		
Thr	Ser	Ala	Trp	Gly	Val	Leu	Val	Ser	Glu	Val	Met	Ser	Gln	Gln	Thr
		35					40					45			
Pro	Met	Ser	Arg	Val	Ile	Gly	Pro	Trp	His	Glu	Trp	Met	Asn	Arg	Trp

50                                      55                                      60  
 Pro Thr Pro Asp Asp Leu Ala Glu Glu Asp Ser Gly Glu Ala Val Ala  
 65                                      70                                      75                                      80  
 Ala Trp Gly Arg Leu Gly Tyr Pro Arg Arg Ala Leu Arg Leu His Ser  
                                     85                                      90                                      95  
 Cys Ala Val Thr Ile Ala Thr Glu His Asp Gly Gly Val Pro Asn Ser  
                                     100                                      105                                      110  
 Asp Asp Glu Leu Val Ala Leu Pro Gly Ile Gly Asp Tyr Thr Ala Ser  
                                     115                                      120                                      125  
 Ala Val Val Ser Phe Ala Phe Gly Gly Arg Ala Thr Val Leu Asp Thr  
                                     130                                      135                                      140  
 Asn Val Arg Arg Leu Ile Ala Arg Ala Glu Ser Gly Ile Ala Asn Cys  
 145                                      150                                      155                                      160  
 Pro Thr Ser Val Thr Arg Ala Glu Arg Val Val Ala Asp Ala Leu Val  
                                     165                                      170                                      175  
 Pro Asp Glu Asp Val Arg Ala Ala Lys Trp Ala Val Ala Ser Met Glu  
                                     180                                      185                                      190  
 Leu Gly Ala Leu Val Cys Thr Ala Arg Ser Pro Gln Cys Glu Val Cys  
                                     195                                      200                                      205  
 Pro Ile Arg Asp Gly Cys Arg Trp Val Ile Asp Gly Arg Pro Asp Asn  
                                     210                                      215                                      220  
 Ala Pro Ala Arg Arg Gly Gln Pro Trp Lys Gly Thr Asp Arg Gln Cys  
 225                                      230                                      235                                      240  
 Arg Gly Val Ile Met Asp Val Val Arg Asn Ser Pro His Gly Val Lys  
                                     245                                      250                                      255  
 Val Gln Met Ala Leu Ser Ala Trp Pro Glu Leu Asp Gln Ala Ser Arg  
                                     260                                      265                                      270  
 Cys Leu Glu Ser Leu Leu Asp Asp Gly Leu Val His Arg Arg Gly Asn  
                                     275                                      280                                      285  
 Leu Ile Ser Leu  
 290

&lt;210&gt; 2191

&lt;211&gt; 502

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2191

nnacgcgtcg agaattctcta ctctgccccg aacaacgtcc ggcttcgtca ggctcacgat  
 60  
 gactcccttg acgacgacac catttccggg ggtagccac attggtgctg cctcatggac  
 120  
 tacattgaat cccgttcaat cctgaacggc gttcaggacg tctccagtct cggaaggacc  
 180  
 agagtattgc tgaattctagc cgacatgacc gaacgcggcc tgagggggga gtccattacc  
 240  
 cgcgaggagg cctcagagat tcttcgcagc agtgatgatg agctcatgtc aatcatcgcc  
 300  
 gccgcccga aagtgcgtcg ccactttttc gataaccggg ttgcctcaa ctacctggc  
 360  
 aacctcaagt cgggcctgtg tccgaagac tgctcctatt gctcgcagcg tctgggatcg  
 420  
 cgtgccgaga tcacgaaata ctctgggccc gatccgcaga aggtacacga cgccgtcgag  
 480

gctgggattg ccggtggtgc ac  
502

<210> 2192  
<211> 104  
<212> PRT  
<213> Homo sapiens

<400> 2192  
Leu Asn Leu Ala Asp Met Thr Glu Arg Gly Leu Arg Gly Glu Ser Ile  
1 5 10 15  
Thr Arg Glu Glu Ala Leu Glu Ile Leu Arg Ser Ser Asp Asp Glu Leu  
20 25 30  
Met Ser Ile Ile Ala Ala Ala Gly Lys Val Arg Arg His Phe Phe Asp  
35 40 45  
Asn Arg Val Arg Leu Asn Tyr Leu Val Asn Leu Lys Ser Gly Leu Cys  
50 55 60  
Pro Glu Asp Cys Ser Tyr Cys Ser Gln Arg Leu Gly Ser Arg Ala Glu  
65 70 75 80  
Ile Thr Lys Tyr Ser Trp Ala Asp Pro Gln Lys Val His Asp Ala Val  
85 90 95  
Glu Ala Gly Ile Ala Gly Gly Ala  
100

<210> 2193  
<211> 321  
<212> DNA  
<213> Homo sapiens

<400> 2193  
ccatggggaa tgcagagcac ggacagtcac acagactgtc ctctctggcc ttctggaccc  
60  
aacatactcc tcttgccaac tgggtattac tggaccttac tgggccttac tggacccaac  
120  
atactcctct tgccaactgg ggatttaaaa attttaaaag cccctttatc tccctccaca  
180  
agtcattgtac tgccaacagg gacacactgt tttctttgga aacctgtctg tgtgccccaga  
240  
cagagggtccc actgccctgg gacagctccc ttgcctanag gggaaggagg gtgtgtgtgc  
300  
tgtgtgtgtt taggttgggg a  
321

<210> 2194  
<211> 106  
<212> PRT  
<213> Homo sapiens

<400> 2194  
Met Gly Asn Ala Glu His Gly Gln Ser His Arg Leu Ser Ser Leu Ala  
1 5 10 15  
Phe Trp Thr Gln His Thr Pro Leu Ala Asn Trp Val Leu Leu Asp Leu  
20 25 30  
Thr Gly Pro Tyr Trp Thr Gln His Thr Pro Leu Ala Asn Trp Gly Phe

```

      35              40              45
Lys Asn Phe Lys Ser Pro Phe Ile Ser Leu His Lys Ser Cys Thr Ala
      50              55              60
Asn Arg Asp Thr Leu Phe Ser Leu Glu Thr Leu Leu Cys Ala Gln Thr
65              70              75              80
Glu Val Pro Leu Pro Trp Asp Ser Ser Leu Ala Xaa Arg Gly Arg Arg
      85              90              95
Val Cys Val Leu Cys Val Phe Arg Leu Gly
      100              105

```

<210> 2195  
 <211> 504  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2195
naccggtctc cctacatcaa tgcccaccgc gattgcacct ttgttgcac gtcacctggc
60
gacgggtgagg cacaccccaa ctttggcaat atcgccacag acctgggtgct gttgcacagc
120
ctgggtgtgc gtctgttact ggtccacggt tcgcgcccgc agatcgacag ccgccttgag
180
gcacgaggcc tgggtccgta ttaccacaag ggcattgcgtg tcaccgatgc atcaacgctc
240
gaatgcgtga tcgatgctgt cgggcaactg cgcattgcga ttgaagcgcg cttgtcgatg
300
gacatggcgt cttcgccaat gcagggttcg cgtctgcgcg tagccagcgg caacctggtc
360
actgcgcggc cgatcggcgt gctcgacggt gtggattttc accataccgg cgaagtgcgc
420
cgggtggacc gcaagggaat caaccgcctg ctcgatgagc gctcgattgt gctgctgtcg
480
cccttgggtt actcgccac cggt
504

```

<210> 2196  
 <211> 168  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2196
Xaa Ala Ser Pro Tyr Ile Asn Ala His Arg Asp Cys Thr Phe Val Val
1              5              10              15
Met Leu Pro Gly Asp Gly Val Ala His Pro Asn Phe Gly Asn Ile Val
      20              25              30
His Asp Leu Val Leu Leu His Ser Leu Gly Val Arg Leu Val Leu Val
      35              40              45
His Gly Ser Arg Pro Gln Ile Asp Ser Arg Leu Glu Ala Arg Gly Leu
      50              55              60
Val Pro Tyr Tyr His Lys Gly Met Arg Val Thr Asp Ala Ser Thr Leu
65              70              75              80
Glu Cys Val Ile Asp Ala Val Gly Gln Leu Arg Ile Ala Ile Glu Ala
      85              90              95
Arg Leu Ser Met Asp Met Ala Ser Ser Pro Met Gln Gly Ser Arg Leu

```

```

          100          105          110
Arg Val Ala Ser Gly Asn Leu Val Thr Ala Arg Pro Ile Gly Val Leu
          115          120          125
Asp Gly Val Asp Phe His His Thr Gly Glu Val Arg Arg Val Asp Arg
          130          135          140
Lys Gly Ile Asn Arg Leu Leu Asp Glu Arg Ser Ile Val Leu Leu Ser
          145          150          155          160
Pro Leu Gly Tyr Ser Pro Thr Gly
          165

```

&lt;210&gt; 2197

&lt;211&gt; 351

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2197

```

acaagtcctg cgacgattcg ctttccggag gcgggcccag gaatggtaat gaaacccgag
60
ttatggggcc ctgcgctcga cgagattgcc gcgggaaaac gtgccggagg ggctgaacag
120
ttagattccg cagtgcagca catccacggt gctactcacg ataaactgtc cgggtgtgtt
180
ccgaaacgct acgatggctg ggatgtcttg gcaggcgagg acccgaatgc accgttgctg
240
cttgtgcta gcccggtctg tgcagtgttt agtcaaaata aggcacaagc ctggtccaat
300
gaagaccaca ttgtttttgc ctgtgggagc tatgaaggta ttgatcaacg c
351

```

&lt;210&gt; 2198

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2198

```

Thr Ser Pro Ser Thr Ile Arg Phe Pro Glu Ala Gly Pro Gly Met Val
  1          5          10          15
Met Lys Pro Glu Leu Trp Gly Pro Ala Leu Asp Glu Ile Ala Ala Gly
          20          25          30
Lys Arg Ala Gly Gly Ala Glu Gln Leu Asp Ser Ala Val Gln His Ile
          35          40          45
His Gly Ala Thr His Asp Lys Leu Ser Gly Ala Val Pro Lys Arg Tyr
          50          55          60
Asp Gly Arg Asp Val Leu Ala Gly Glu Asp Pro Asn Ala Pro Leu Leu
          65          70          75          80
Leu Val Pro Ser Pro Ala Gly Ala Val Phe Ser Gln Asn Lys Ala Gln
          85          90          95
Ala Trp Ser Asn Glu Asp His Ile Val Phe Ala Cys Gly Arg Tyr Glu
          100          105          110
Gly Ile Asp Gln Arg
          115

```

&lt;210&gt; 2199

&lt;211&gt; 457

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2199

agacgccggc cgccaagatc tgcattcccta ggccacgcta agaccctggg gaagagcgca  
 60  
 ggagccccggg agaagggctg gaaggagggg actggacgtg cggagaattc cccctctaaa  
 120  
 ggcagaagcc cccgccccca cctcccgagc tccgttcggg cagagcgctt gcctgcctgc  
 180  
 cgttgctggg ggccccacc tgcctccagc atgccaggcc cggccaccga cgcggggaag  
 240  
 atcccccttct gcgacgcaa ggaagaaatc cgtgccgggc tcgaaagctc tgagggcggc  
 300  
 ggccggcccg agaggccagg cgcgcggggg cagcggcaga acatcgtctg gaggaatgtc  
 360  
 gtccctgatga gcttgctcca cttggggggc gtgtactccc tggtgctcat ccccaaagcc  
 420  
 aagccactca ctctgctctg gggtaagtcc cgccggc  
 457

&lt;210&gt; 2200

&lt;211&gt; 152

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2200

Arg	Arg	Arg	Pro	Pro	Arg	Ser	Ala	Ser	Leu	Gly	His	Ala	Lys	Thr	Leu
1				5					10					15	
Gly	Lys	Ser	Ala	Gly	Ala	Arg	Glu	Lys	Gly	Trp	Lys	Glu	Gly	Thr	Gly
		20						25					30		
Arg	Ala	Glu	Asn	Ser	Pro	Leu	Lys	Gly	Arg	Ser	Pro	Arg	Pro	His	Pro
		35					40					45			
Pro	Ser	Ser	Val	Arg	Ala	Glu	Arg	Leu	Pro	Ala	Cys	Arg	Cys	Trp	Gly
	50					55					60				
Arg	Pro	Pro	Arg	Pro	Ala	Met	Pro	Gly	Pro	Ala	Thr	Asp	Ala	Gly	Lys
65					70					75				80	
Ile	Pro	Phe	Cys	Asp	Ala	Lys	Glu	Glu	Ile	Arg	Ala	Gly	Leu	Glu	Ser
			85					90						95	
Ser	Glu	Gly	Gly	Gly	Gly	Pro	Glu	Arg	Pro	Gly	Ala	Arg	Gly	Gln	Arg
		100					105						110		
Gln	Asn	Ile	Val	Trp	Arg	Asn	Val	Val	Leu	Met	Ser	Leu	Leu	His	Leu
	115					120						125			
Gly	Ala	Val	Tyr	Ser	Leu	Val	Leu	Ile	Pro	Lys	Ala	Lys	Pro	Leu	Thr
	130					135					140				
Leu	Leu	Trp	Gly	Lys	Ser	Arg	Arg								
145					150										

&lt;210&gt; 2201

&lt;211&gt; 336

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2201

agtactgcga tggacagcta tgctgtggat ggtggtcgca aattacatgt ttgtggtaac  
 60  
 aaccttgatt gcgatgggta tgaagtcgaa gaaggcgaat tcaagatcaa gggttatgat  
 120  
 ggtccgacta tcccatgcga taaatgtgat ggtgagatgc agcttaaaac gggtcgtttt  
 180  
 ggtccatatt tcgcatgtac tagctgtgac aatactcgta aggtactcaa gagtgggtcaa  
 240  
 cctgctccgc cacgtgtaga cccaatcaaa atggagcacc tacgttcaac gaagcatgat  
 300  
 gatttcttcg tcttacgtga gggcgctgct ggttta  
 336

<210> 2202

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2202

Ser	Thr	Ala	Met	Asp	Ser	Tyr	Val	Val	Asp	Gly	Gly	Arg	Lys	Leu	His
1				5					10					15	
Val	Cys	Gly	Asn	Asn	Pro	Asp	Cys	Asp	Gly	Tyr	Glu	Val	Glu	Glu	Gly
		20					25						30		
Glu	Phe	Lys	Ile	Lys	Gly	Tyr	Asp	Gly	Pro	Thr	Ile	Pro	Cys	Asp	Lys
		35				40					45				
Cys	Asp	Gly	Glu	Met	Gln	Leu	Lys	Thr	Gly	Arg	Phe	Gly	Pro	Tyr	Phe
	50				55					60					
Ala	Cys	Thr	Ser	Cys	Asp	Asn	Thr	Arg	Lys	Val	Leu	Lys	Ser	Gly	Gln
65					70				75					80	
Pro	Ala	Pro	Pro	Arg	Val	Asp	Pro	Ile	Lys	Met	Glu	His	Leu	Arg	Ser
			85				90						95		
Thr	Lys	His	Asp	Asp	Phe	Phe	Val	Leu	Arg	Glu	Gly	Ala	Ala	Gly	Leu
			100				105						110		

<210> 2203

<211> 273

<212> DNA

<213> Homo sapiens

<400> 2203

ctcgagagat gcagtcacag ccgggggtggg aagctgtgca gacagccccc gatctggggac  
 60  
 gtgatggaaa actcaacaga ctggttcaga tcttggtccc gagcccagag gcaccggggga  
 120  
 cccccagggc tgtttctccc tggccacacc agtaccaccac ttccaaatgc cctgtaggtg  
 180  
 accaccaggc cacacaggcc cgtctgaggg gccacaggct gtgcaccatg ggacgcaggc  
 240  
 ctgtccctgc ctccctccga tgctctgatg gtg  
 273

<210> 2204

<211> 88

<212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2204

```

Met Gln Ser Gln Pro Gly Trp Glu Ala Val Gln Thr Ala Pro Asp Leu
 1             5             10             15
Gly Arg Asp Gly Lys Leu Asn Arg Leu Val Gln Ile Leu Ala Arg Ser
      20             25             30
Pro Glu Ala Pro Gly Thr Pro Arg Ala Val Ser Pro Trp Pro His Gln
      35             40             45
Tyr Pro Thr Ser Lys Cys Pro Val Gly Asp His Gln Ala Thr Gln Ala
      50             55             60
Arg Leu Arg Gly His Arg Leu Cys Thr Met Gly Arg Arg Pro Val Pro
65             70             75             80
Ala Ser Leu Arg Cys Pro Asp Gly
                        85

```

&lt;210&gt; 2205

&lt;211&gt; 387

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2205

```

gnnnnnnggng nnnnactggg gtgcatgggt aaaatcctgc aagctactgg gttgccacag
60
catctgtccc actttgtgtt ctgcaaatac agcttctggg atcaacagga gccggtgatt
120
gtcgctcctg aagtggacac ctctcctctt tccgtcagca aggagccgca ctgcatgggt
180
gtctttgatc attgcaatga gttttctgtt aacatcaccg aagactttat cgagcatctt
240
tccgaaggag cattggcaat tgaagtatat ggacataaaa taaacgatcc ccggaaaaac
300
cccgccctgt gggatttggg aatcatccaa gcaaagacac gtagtcttcg ggacagatgg
360
agtgaagtgc ccaggaaatt ggaattc
387

```

&lt;210&gt; 2206

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2206

```

Xaa Xaa Gly Xaa Xaa Leu Val Cys Met Val Lys Ile Leu Gln Ala Thr
 1             5             10             15
Gly Leu Pro Gln His Leu Ser His Phe Val Phe Cys Lys Tyr Ser Phe
      20             25             30
Trp Asp Gln Gln Glu Pro Val Ile Val Ala Pro Glu Val Asp Thr Ser
      35             40             45
Ser Ser Ser Val Ser Lys Glu Pro His Cys Met Val Val Phe Asp His
      50             55             60
Cys Asn Glu Phe Ser Val Asn Ile Thr Glu Asp Phe Ile Glu His Leu
65             70             75             80
Ser Glu Gly Ala Leu Ala Ile Glu Val Tyr Gly His Lys Ile Asn Asp

```



				85					90					95	
Pro	Arg	Lys	Asn	Pro	Ala	Leu	Trp	Asp	Leu	Gly	Ile	Ile	Gln	Ala	Lys
				100					105					110	
Thr	Arg	Ser	Leu	Arg	Asp	Arg	Trp	Ser	Glu	Val	Pro	Arg	Lys	Leu	Glu
				115					120					125	
Phe															

```
<210> 2207
<211> 667
<212> DNA
<213> Homo sapiens
```

<400>	2207				
atctccaacc	cgcgagacct	ctccaataca	gccgggtctcg	agggtacat	cgacctgggc
60					
cgcgagtctt	ccagcctgca	ctcactgtct	tgggaggccg	tcagccagct	ggagcagagc
120					
atatgatcca	aactggggacc	cctgcctcgg	atcctgaggg	acgtccacac	agcactgagc
180					
acccccaggta	gcggggcagct	cccagggacc	aatgacctgg	cctccacacc	gggtcttgcc
240					
agcagcagca	tctcagctgg	gctgcagaag	atggtgattg	agaacgatct	ttccgggtctg
300					
atagatttca	cccggttacc	gtctccaacc	cccgaataca	aggacttgtt	ttttgtcaca
360					
aggtctctccg	gggtccagcc	ctcacctgcc	cgcagctcga	gttactcggg	agccaacgag
420					
cctgatcttc	agatggccaa	cgggtgcaag	agcctctcca	tgggtgacct	ccaggacgcc
480					
cgcacgctgg	atggggaggc	aggctccccg	gcggggccccg	acgtctctcc	cacagatggg
540					
caggccgctg	cagctcagct	gggtggccggg	tggccggccc	gggcaacccc	agtgaacctg
600					
gcagggtctg	ccacgggtcg	gcggggcaggc	cagacacca	ccacaccagg	cacctccgag
660					
ggcgcgcg					
667					

```
<210> 2208
<211> 222
<212> PRT
<213> Homo sapiens
```

<400> 2208  
 Ile Ser Asn Pro Glu Thr Leu Ser Asn Thr Ala Gly Phe Glu Gly Tyr  
 1 5 10 15  
 Ile Asp Leu Gly Arg Glu Leu Ser Ser Leu His Ser Leu Trp Glu  
 20 25 30  
 Ala Val Ser Gln Leu Glu Gln Ser Ile Val Ser Lys Leu Gly Pro Leu  
 35 40 45  
 Pro Arg Ile Leu Arg Asp Val His Thr Ala Leu Ser Thr Pro Gly Ser  
 50 55 60  
 Gly Gln Leu Pro Gly Thr Asn Asp Leu Ala Ser Thr Pro Gly Ser Gly

```

65          70          75          80
Ser Ser Ser Ile Ser Ala Gly Leu Gln Lys Met Val Ile Glu Asn Asp
          85          90          95
Leu Ser Gly Leu Ile Asp Phe Thr Arg Leu Pro Ser Pro Thr Pro Glu
          100          105          110
Asn Lys Asp Leu Phe Phe Val Thr Arg Ser Ser Gly Val Gln Pro Ser
          115          120          125
Pro Ala Arg Ser Ser Ser Tyr Ser Glu Ala Asn Glu Pro Asp Leu Gln
          130          135          140
Met Ala Asn Gly Gly Lys Ser Leu Ser Met Val Asp Leu Gln Asp Ala
          145          150          155          160
Arg Thr Leu Asp Gly Glu Ala Gly Ser Pro Ala Gly Pro Asp Val Leu
          165          170          175
Pro Thr Asp Gly Gln Ala Ala Ala Ala Gln Leu Val Ala Gly Trp Pro
          180          185          190
Ala Arg Ala Thr Pro Val Asn Leu Ala Gly Leu Ala Thr Val Arg Arg
          195          200          205
Ala Gly Gln Thr Pro Thr Thr Pro Gly Thr Ser Glu Gly Ala
          210          215          220

```

<210> 2209  
 <211> 353  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2209
ngggaagttg gtactagcct cccaaagcca ctctcctgag tgacattgag agcatcctat
60
agagaaggcc atgagagaga tagcactggg acagatgggtg tcagcagagg ggactccaga
120
ccacagcaga agtgaccaag ctgtagcttc cttagatggc cccaagggtg ggaggcttca
180
cacagcagag cctgggtctg gaggcacctt ggggatgttt ttccccatta ggcccctgag
240
ctctatggaa gcacttaact gcctgttccc cgcttattct gtgtttaaac caaggaaaca
300
acatgcctgg ggtctgaaat cctggattca aatcctgact gtgttgtgtg ctt
353

```

<210> 2210  
 <211> 94  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2210
Met Arg Glu Ile Ala Leu Gly Gln Met Val Ser Ala Glu Gly Thr Pro
1      5      10      15
Asp His Ser Arg Ser Asp Gln Ala Val Ala Ser Leu Asp Gly Pro Lys
20     25     30
Gly Gly Arg Leu His Thr Ala Glu Pro Gly Ser Gly Gly Thr Leu Gly
35     40     45
Met Phe Phe Pro Ile Arg Pro Leu Ser Ser Met Glu Ala Leu Asn Cys
50     55     60
Leu Phe Pro Ala Tyr Ser Val Phe Lys Pro Arg Lys Gln His Ala Trp

```

65					70					75				80
Gly	Leu	Lys	Ser	Trp	Ile	Gln	Ile	Leu	Thr	Val	Leu	Cys	Ala	
			85						90					

<210> 2211

<211> 493

<212> DNA

<213> Homo sapiens

<400> 2211

ctgaccacat ctccgacgat cctagacctc tgttctgcat ctccggacacc accgactgct

60

cactgtaccc tgggactgca cagagggaaa cgattaccaa acccagagac ggggaccgga

120

aggaaggagg ggaaggggat ggatccatgt actttggggt tggagaaaatg ggggacagca

180

agtctcctca acccaaatac agccccctcg ggaggctcct gccccgtctc tgtggatagt

240

gagcccagct gcaagggcgg cctgccaggg acaaaccac caaaaggaaa gatgtttag

300

aaccaaagag aggtctccctg aaagaggcgt ctcccggggc ctccaagccc gggagcgccc

360

ggcggacagg gggcagtggc caagtctgtg cggaccctga cgcctcaga gaacgagagc

420

atgcgcaaag tcattgcccc caccaagtcc agcagaggcg cgggctggag gcgaccagag

480

ctgtcatccc ggg

493

<210> 2212

<211> 126

<212> PRT

<213> Homo sapiens

<400> 2212

Met Gly Met Thr Leu Arg Met Leu Ser Phe Ser Glu Ala Val Arg Val

1 5 10 15

Arg Thr Asp Leu Ala Thr Ala Pro Cys Pro Pro Gly Ala Pro Gly Leu

20 25 30

Gly Gly Pro Gly Arg Arg Leu Phe Gln Gly Ala Ser Leu Trp Phe Tyr

35 40 45

Asn Ile Phe Pro Phe Gly Gly Phe Val Pro Gly Arg Pro Pro Leu Gln

50 55 60

Leu Gly Ser Leu Ser Thr Glu Thr Gly Gln Glu Pro Pro Arg Gly Ala

65 70 75 80

Val Phe Gly Leu Arg Arg Leu Ala Val Pro His Phe Ser Asn Pro Lys

85 90 95

Val His Gly Ser Ile Pro Phe Pro Ser Phe Leu Pro Val Pro Val Ser

100 105 110

Gly Phe Gly Asn Arg Phe Pro Leu Cys Ser Pro Arg Val Gln

115 120 125

<210> 2213

<211> 327

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2213

acgcgtccga cgggcagttc cggcagctgc gggaaagctg cgatgcgctc gccgagcatt  
 60  
 gccggtgctt cgacacactg ggttatatcg ccctcaaagc acaggtctac gaaggttctg  
 120  
 acggaaggcc cggccaatcc gatcgcggcc tcggcgctgc gcatcatccg ggcgcgctg  
 180  
 tcgcagctct ggggcacgtc gctgctccgc aacggacggg cggaacagag tgtggtggag  
 240  
 atcgcccggt tggtcgacgc gatcacgtca cgggacgagg aagccgccca gcgtgcactg  
 300  
 ctcgaccaca atcgcagcgc gttggaa  
 327

&lt;210&gt; 2214

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2214

Met	Arg	Ser	Pro	Ser	Ile	Ala	Gly	Ala	Ser	Thr	His	Trp	Val	Ile	Ser
1				5					10					15	
Pro	Ser	Lys	His	Arg	Ser	Thr	Lys	Val	Leu	Thr	Glu	Gly	Pro	Ala	Asn
			20					25					30		
Pro	Ile	Ala	Ala	Ser	Ala	Leu	Arg	Ile	Ile	Arg	Ala	Arg	Val	Ser	Gln
			35				40					45			
Leu	Trp	Gly	Thr	Ser	Leu	Leu	Arg	Asn	Gly	Arg	Ala	Glu	Gln	Ser	Val
	50					55				60					
Val	Glu	Ile	Ala	Arg	Leu	Val	Asp	Ala	Ile	Thr	Ser	Arg	Asp	Glu	Glu
65					70				75					80	
Ala	Ala	Gln	Arg	Ala	Leu	Leu	Asp	His	Asn	Arg	Ser	Ala	Leu	Glu	
			85						90					95	

&lt;210&gt; 2215

&lt;211&gt; 430

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2215

ctggggatca tgccctacat cactgcgctg atcatcctgc agctgctgac agtcgtgac  
 60  
 ccgaagctgg aaacctttaa gaaggagggc gcgtccggtc agaacaagat caccagctac  
 120  
 acccgttacc tcaactctgt gcttggcctg ttgcaggcaa cggccttctg cacgcttgcc  
 180  
 acctccggcc gtctattcac cnntgcagct ntgccagtcg tctactccac ctgggtcttc  
 240  
 gaagtcgtcg tcatgacct gactatgacg gccggtacga ccatcgatcat gtggatgggt  
 300  
 gagctcatca ccgaccgagg tatcggaac ggtatgtcga tcatgatttt cactcagatt  
 360

gcggcgcggtt tccctgactc gctgtgggtct atcaagggtcg ctcgaaatgg cgccgggtcag  
 420  
 gctcacgcgt  
 430

<210> 2216  
 <211> 143  
 <212> PRT  
 <213> Homo sapiens

<400> 2216  
 Leu Gly Ile Met Pro Tyr Ile Thr Ala Ser Ile Ile Leu Gln Leu Leu  
 1 5 10 15  
 Thr Val Val Ile Pro Lys Leu Glu Thr Leu Lys Lys Glu Gly Ala Ser  
 20 25 30  
 Gly Gln Asn Lys Ile Thr Gln Tyr Thr Arg Tyr Leu Thr Leu Val Leu  
 35 40 45  
 Gly Leu Leu Gln Ala Thr Ala Phe Val Thr Leu Ala Thr Ser Gly Arg  
 50 55 60  
 Leu Phe Thr Xaa Ala Ala Xaa Pro Val Val Tyr Ser Thr Ser Val Phe  
 65 70 75 80  
 Glu Val Val Val Met Ile Leu Thr Met Thr Ala Gly Thr Thr Ile Val  
 85 90 95  
 Met Trp Met Gly Glu Leu Ile Thr Asp Arg Gly Ile Gly Asn Gly Met  
 100 105 110  
 Ser Ile Met Ile Phe Thr Gln Ile Ala Ala Arg Phe Pro Asp Ser Leu  
 115 120 125  
 Trp Ser Ile Lys Val Ala Arg Asn Gly Ala Gly Gln Ala His Ala  
 130 135 140

<210> 2217  
 <211> 444  
 <212> DNA  
 <213> Homo sapiens

<400> 2217  
 accagggccg cttcgaagga cctctctcca gctatcgtga cgacgacggc gaagcggggt  
 60  
 atgacgtggc tcgatgacga cgtggggccc gacctgttga atcaggctga ttccatggac  
 120  
 catgcccctgg aggccaccgt cccaggtcgg gtcaccacgc cggacgcca agtcatccag  
 180  
 acctgtgccg tgttgctga ccttgctcgc gtggcagtca gccagctggg ccgaaatgac  
 240  
 gaggactcta gggaaccagt cgatgaggag agagtacagg ctcaagcgc gatgcgggag  
 300  
 gttttcgaga ccgccgaacg catggtgggg ctggccgccg ccgacgtggt gtgggtctct  
 360  
 gagtctgaga agggataccg cagcattcac gtcgctccgc tgagtgttgg cggcttgcta  
 420  
 cgagagaatg tctttgctca gtcc  
 444

<210> 2218

<211> 148  
 <212> PRT  
 <213> Homo sapiens

<400> 2218  
 Thr Arg Ala Ala Ser Lys Asp Leu Ser Pro Ala Ile Val Thr Thr Thr  
 1 5 10 15  
 Ala Lys Arg Ala Met Thr Trp Leu Asp Asp Val Gly Ala Asp Leu  
 20 25 30  
 Leu Asn Gln Ala Asp Ser Met Asp His Ala Leu Glu Ala Thr Val Pro  
 35 40 45  
 Gly Arg Val Thr Thr Pro Asp Ala Gln Val Ile Gln Thr Cys Ala Val  
 50 55 60  
 Leu Arg Asp Leu Ala Arg Val Ala Val Ser Gln Leu Gly Arg Asn Asp  
 65 70 75 80  
 Glu Asp Ser Arg Glu Pro Val Asp Ala Glu Arg Val Gln Ala Gln Ala  
 85 90 95  
 Xaa Met Arg Glu Val Phe Glu Thr Ala Glu Arg Met Val Gly Leu Ala  
 100 105 110  
 Ala Ala Asp Val Val Trp Val Ser Glu Ser Glu Lys Gly Tyr Arg Ser  
 115 120 125  
 Ile His Val Ala Pro Leu Ser Val Gly Gly Leu Leu Arg Glu Asn Val  
 130 135 140  
 Phe Ala Gln Ser  
 145

<210> 2219  
 <211> 688  
 <212> DNA  
 <213> Homo sapiens

<400> 2219  
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 ggcattacga atatggcgtg gatgtggcta tggttcgacg agcccggaaa ccgttgggag  
 120  
 tggtcgatcc ttttccccgc tgggtggctg accagcgctt tggtcagtca ggggttcggt  
 180  
 ggaatgttcc atagtgtgca gattgcgcgt catgtcagca gttaccacgg catcatggtc  
 240  
 gctttcgcgc tcggtgggta cggatggctt gcgatgcaca acttgcgtca ccctgatgag  
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 cgctattcga ttcgctcggc cttgataatc ggcacgcgca tccagttcac ctgggaggca  
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 420  
 atcgagacga atctcggcgc tccgttcatg ttgctcattg tgaaagcttg gcgcgcgcca  
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 600  
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688

<210> 2220

<211> 189

<212> PRT

<213> Homo sapiens

<400> 2220

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Met Ser Val Leu Pro Leu Glu Ile Trp Leu Ser Phe Ser Tyr Gly Ile
 1          5          10          15
Thr Asn Met Ala Trp Met Trp Leu Trp Phe Asp Glu Pro Gly Asn Arg
 20          25          30
Trp Glu Trp Ser Ile Leu Phe Pro Ala Gly Trp Leu Thr Ser Ala Leu
 35          40          45
Val Ser Gln Gly Phe Gly Gly Met Phe His Ser Val Gln Ile Ala Arg
 50          55          60
His Val Ser Ser Tyr His Gly Ile Met Val Ala Phe Ala Leu Val Gly
 65          70          75          80
Tyr Gly Trp Leu Ala Met His Asn Leu Arg His Pro Asp Glu Arg Tyr
 85          90          95
Ser Ile Arg Ser Ala Leu Ile Ile Gly Ile Gly Ile Gln Phe Thr Trp
100          105          110
Glu Ala Val Leu Met Ile Ser Gly Ile Arg Pro Leu Thr Trp Arg Pro
115          120          125
Leu Val Ile Asp Ser Leu Ile Glu Thr Asn Leu Gly Ala Pro Phe Met
130          135          140
Leu Leu Ile Val Lys Ala Trp Arg Ala Pro Pro Glu Gly Ile Pro Gly
145          150          155          160
Ser Thr Ser Pro Arg Pro Thr Ala Arg Gly Thr Ala Arg Val Tyr Met
165          170          175
Arg Asp Asp Leu Val Ser Arg Arg Leu Leu Gln Arg Pro
180          185
```

<210> 2221

<211> 530

<212> DNA

<213> Homo sapiens

<400> 2221

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120
ctacaacaac gcctcagtaa aaccaaaacc atcaagcaag gcatgatgca agaactactc
180
acagggaaaa cgaggttggt atgagccaca aggtgaattt agtgcattgag ctggataagc
240
gtattatctc ggtaaatacg ttattgtcac agcctgagct tgctattccg gcttatcagc
300
ggccttataa atggtcacaa gagaacctaa atgcgctgat gaggatttta cgaatttatc
360
gtaacaaatc ggcttatcgg ctggggacgg tggtttttca ttatcataat gaaccgtag
420
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acaacgagaa tacccacaag ctggatattg tagacgggtca gcaacgtacc ttaaccttgt  
 480  
 tgctgctagt caaagccatt ttagaagaac ggttgtctgc gttaacgcgt  
 530

<210> 2222  
 <211> 67  
 <212> PRT  
 <213> Homo sapiens

<400> 2222  
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 Ile Leu Pro Pro Lys Glu Glu Gln Thr Ala Ile Ala Asn Val Leu Ser  
 20 25 30  
 Asp Met Asp Thr Glu Leu Asp Ala Leu Gln Gln Arg Leu Ser Lys Thr  
 35 40 45  
 Lys Thr Ile Lys Gln Gly Met Met Gln Glu Leu Leu Thr Gly Lys Thr  
 50 55 60  
 Arg Leu Val  
 65

<210> 2223  
 <211> 482  
 <212> DNA  
 <213> Homo sapiens

<400> 2223  
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 acaggcgcca gacattgttg tggacgatgc cgctgtcgat cgggtggcacg ccggtgaaga  
 120  
 tgcatttatc caacggccgg gacagggccg gcagttcaca gtccagtttg taaagcgctg  
 180  
 cgcgtcctgc gctgatatag gcctggagat gcccctgggc gtgtcgggca acctcgtagt  
 240  
 tcaggccgctc gagcaccaca aggatgacgt tgtgcttcat aaggggagac gctccgcaac  
 300  
 gataggcttg actcatttca cttgaggaac ggggtcaaaa ctgtggggcg gggcaagccc  
 360  
 gctcccacac aagcccgtgc ccacattgga tctccaatgt gggctacagc cttactgcat  
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 480  
 gt  
 482

<210> 2224  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 2224  
 Met Ser Gln Ala Tyr Arg Cys Gly Ala Ser Pro Leu Met Lys His Asn



1	5	10	15
Val Ile Leu	Val Val Leu Asp Gly	Leu Asn Tyr Glu Val	Ala Arg His
	20	25	30
Ala Met Gly	His Leu Gln Ala Tyr	Ile Ser Ala Gly	Arg Ala Ala Leu
	35	40	45
Tyr Lys Leu	Asp Cys Glu Leu Pro	Ala Leu Ser Arg	Pro Leu Asp Lys
	50	55	60
Cys Ile Phe	Thr Gly Val Pro Pro	Ile Asp Ser Gly	Ile Val His Asn
65	70	75	80
Asn Val Ser	Arg Leu Ser Asn Gln	Arg Ser Ile Phe	His Tyr Ala Thr
	85	90	95
Asp Ala Gly	Leu Thr Thr Ala Ala	Ala	
	100	105	

&lt;210&gt; 2225

&lt;211&gt; 753

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2225

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 60  
 ggccgtcatcc tcgatctcat gggtcacgga gaggatctcg tccagtatct actcaaaggg  
 120  
 cgattcactg aggtgtcccg cgtgtccgag acgttcatcc gtcagcgtcc caagccactc  
 180  
 aaggagggca tcggccacac aggttgggtc gtctcggacg agctcggggc ggtgggcaac  
 240  
 gaggattatt gcgctgtcat cgcctgtatg gaaaacggag tgatgtgcac cctggagtcc  
 300  
 agtcgggtca gtgttggggc gcgcgcggag tacatcgtcg agatctatgg aaccgacgga  
 360  
 tcaatccggg ggaacttcga ggatctcaac catttgagg tctgtctggg gcgaaacaat  
 420  
 cgtgccctgc agggatatgt caactgcatg gccggaccag acttcccgga gttcatgcgt  
 480  
 ttccaaccgg gagccggaac atccatgggc tttagcgaca tgaaggctcg tgaggctgctg  
 540  
 aaattcgtcc gaggggtctt ggatgggcag caatatggcc catctgtcgc cgatgggttg  
 600  
 gcctcagcgg aggtcaacga tgcgatcggt gcctcctgcg ggggaccatg cctggcatga  
 660  
 cgtgaagccg gtttcgggga gaaccacgtt cgataagtga ccgcgtcatc gcgtgtctgt  
 720  
 gaccaggcct ggcggcacia ccaggctcgcc ggc  
 753

&lt;210&gt; 2226

&lt;211&gt; 219

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2226

Xaa Ala Ser Asp Pro His Gly Pro Leu Thr Trp Arg Tyr Asp Arg Glu

```

      1           5           10           15
Arg Ala Gly Ala Gly Val Ile Leu Asp Leu Met Gly His Gly Glu Asp
      20           25           30
Leu Val Gln Tyr Leu Leu Lys Gly Arg Phe Thr Glu Val Ser Ala Val
      35           40           45
Ser Glu Thr Phe Ile Arg Gln Arg Pro Lys Pro Leu Lys Glu Gly Ile
      50           55           60
Gly His Thr Gly Trp Val Val Ser Asp Glu Leu Gly Pro Val Gly Asn
      65           70           75           80
Glu Asp Tyr Cys Ala Val Ile Ala Arg Met Glu Asn Gly Val Met Cys
      85           90           95
Thr Leu Glu Ser Ser Arg Val Ser Val Gly Pro Arg Ala Glu Tyr Ile
      100          105          110
Val Glu Ile Tyr Gly Thr Asp Gly Ser Ile Arg Trp Asn Phe Glu Asp
      115          120          125
Leu Asn His Leu Gln Val Cys Leu Gly Arg Asn Asn Arg Ala Leu Gln
      130          135          140
Gly Tyr Val Asn Cys Met Ala Gly Pro Asp Phe Pro Glu Phe Met Arg
      145          150          155          160
Phe Gln Pro Gly Ala Gly Thr Ser Met Gly Phe Asp Asp Met Lys Val
      165          170          175
Val Glu Ala Ala Lys Phe Val Arg Gly Val Leu Asp Gly Gln Gln Tyr
      180          185          190
Gly Pro Ser Val Ala Asp Gly Trp Ala Ser Ala Glu Val Asn Asp Ala
      195          200          205
Ile Val Ala Ser Cys Gly Gly Pro Cys Leu Ala
      210          215

```

&lt;210&gt; 2227

&lt;211&gt; 324

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2227

```

ggatccgaaa cgttgggagc ataaagcagc atggcgccacc tactgaagac ggtggtggct
60
ggctgttcat gtcctttcct tagcaacttg gggtcctcta aggttctacc tgggaagaga
120
gactttgtac gaacgcttcg tactcaccag gcactgtggt gtaaatcccc ggtaaagcca
180
ggaattccat ataagcagtt gacagttggg gtcccacaagg agattttcca aaacgagaag
240
cgagttgcat tgtctcctgc ggggggtccag gccctggcca agcaggggctt caatgttgtc
300
gtggaatcag gcgcaggcga agct
324

```

&lt;210&gt; 2228

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2228

```

Met Ala His Leu Leu Lys Thr Val Val Ala Gly Cys Ser Cys Pro Phe

```

```

      1           5           10           15
Leu Ser Asn Leu Gly Ser Ser Lys Val Leu Pro Gly Lys Arg Asp Phe
      20           25           30
Val Arg Thr Leu Arg Thr His Gln Ala Leu Trp Cys Lys Ser Pro Val
      35           40           45
Lys Pro Gly Ile Pro Tyr Lys Gln Leu Thr Val Gly Val Pro Lys Glu
      50           55           60
Ile Phe Gln Asn Glu Lys Arg Val Ala Leu Ser Pro Ala Gly Val Gln
      65           70           75           80
Ala Leu Val Lys Gln Gly Phe Asn Val Val Val Glu Ser Gly Ala Gly
      85           90           95
Glu Ala

```

&lt;210&gt; 2229

&lt;211&gt; 320

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2229

```

acgcgtgaag gggccctgtg acgaggtcat ttctgtccat ggggggtcca gatggtgagg
60
ccacacagaga gggaacgggc ggggggaggg gaggagagaa gacagactca ggcagaaccc
120
tagctcagcc cttctctgcg tgctgggccc tgggaggatg ccatccccag tcccctcttc
180
tgggccttgc tctggggact cggcacagat ggatccagtg catcctcagc cccctgagaa
240
gctgtgtctg catcagctcc ttctctgggt acagggcacg ggaagcggct gccagcagg
300
cctcggtccc gccaaagtgt
320

```

&lt;210&gt; 2230

&lt;211&gt; 94

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2230

```

Met Gly Gly Pro Asp Gly Glu Ala His Arg Glu Gly Thr Gly Gly Gly
      1           5           10           15
Arg Gly Gly Glu Lys Thr Asp Ser Gly Arg Thr Leu Ala Gln Pro Leu
      20           25           30
Pro Ala Cys Leu Ala Leu Gly Gly Cys His Pro Gln Ser Pro Leu Leu
      35           40           45
Gly Pro Ala Leu Gly Thr Arg His Arg Trp Ile Gln Cys Ile Leu Ser
      50           55           60
Pro Leu Arg Ser Cys Ala Ala Ile Ser Ser Phe Ser Gly Tyr Arg Ala
      65           70           75           80
Arg Glu Ala Ala Ala Gln Gln Ala Ser Val Pro Pro Ser Cys
      85           90

```

&lt;210&gt; 2231

&lt;211&gt; 671

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2231

gggctgtcta ccacgggctt cgggacttgg ggcagcttcc tgagctctct gagctgcagt  
 60  
 tccttcaacc acaaaatgag gagagtgcag gacctcagag gcttactgtg aggatggaga  
 120  
 aaagcccagt tcaatgcccc actgggaaat gcttccatt aattgtggaa ttgtcgtgcc  
 180  
 catttactgt cggggtgaca ggggggggtgg gggtcagagt agagacagga gaaggaagtg  
 240  
 agcatttgtg ggataccac cactgccag ggactgaacc ctatctggat ctctgcagc  
 300  
 cctccaatg gcaactgtgaa gccagtgttg ttttacagat gaggaactg agatttgtgg  
 360  
 ctataacaga taaacagatg accctgaatg gggcaggtca tgtcatctgc catagataca  
 420  
 tgcatagaac aatgcaaacc agtcagctccc ctctgagtca gaccaggctg accatcaggg  
 480  
 acatgcagac actggcaggg ctgggggtgtg tccccatcgg tgatagcctg gtgcccccat  
 540  
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 600  
 ttttctctca ccagctttct ttttctatt ccttcttaga cacctgagct gcggtgatca  
 660  
 cagctcttaa g  
 671

&lt;210&gt; 2232

&lt;211&gt; 177

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2232

Met	Glu	Lys	Ser	Pro	Val	Gln	Cys	Pro	Thr	Gly	Lys	Cys	Phe	Pro	Leu
1				5					10					15	
Ile	Val	Glu	Leu	Ser	Cys	Pro	Phe	Thr	Val	Gly	Val	Thr	Gly	Gly	Val
			20					25					30		
Gly	Val	Arg	Val	Glu	Thr	Gly	Glu	Gly	Ser	Glu	His	Leu	Trp	Asp	Thr
		35				40					45				
His	His	Val	Pro	Gly	Thr	Glu	Pro	Tyr	Leu	Asp	Leu	Leu	Gln	Pro	Ser
	50				55					60					
Gln	Trp	His	Cys	Glu	Ala	Ser	Val	Val	Leu	Gln	Met	Arg	Lys	Leu	Arg
65				70					75					80	
Phe	Val	Ala	Ile	Thr	Asp	Lys	Gln	Met	Thr	Leu	Asn	Gly	Ala	Gly	His
			85						90					95	
Val	Ile	Cys	His	Arg	Tyr	Met	His	Arg	Thr	Met	Gln	Thr	Ser	Gln	Ser
		100						105					110		
Pro	Leu	Ser	Gln	Thr	Arg	Leu	Thr	Ile	Arg	Asp	Met	Gln	Thr	Leu	Ala
	115					120						125			
Gly	Leu	Gly	Leu	Phe	Pro	Ile	Gly	Asp	Ser	Leu	Val	Pro	Pro	Trp	Pro
	130					135					140				
Leu	Met	Pro	Thr	Ala	Val	Trp	Lys	Ala	Gly	Ser	Leu	Leu	Arg	Arg	Gln

145                      150                      155                      160  
 Gly Asp Ile Phe Ser His Gln Leu Ser Phe Phe Tyr Ser Phe Leu Asp  
                          165                      170                      175

Thr

<210> 2233

<211> 6199

<212> DNA

<213> Homo sapiens

<400> 2233

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 120  
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 240  
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2280  
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2580  
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<211> 1701

<212> PRT

<213> Homo sapiens

<400> 2234

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Leu	Glu	Ala	Leu	Val	Ala	Arg	Ala	Ile	Arg	Asn	Ile	Glu	Met	Thr	Gln
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Val	Tyr	Glu	Lys	Ile	Met	Glu	His	Ala	Gly	Lys	Asn	Gln	Val	Leu	Val
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 Met Leu Gly Arg Ala Gly Arg Pro Gln Tyr Asp Thr Lys Gly Glu Gly  
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 Thr Val Arg Glu Glu Glu Lys Leu Glu Leu Gln Lys Leu Leu Glu Arg  
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 Gln Ser Met Cys Pro Leu Arg Gln Phe Arg Lys Leu Pro Glu Glu Val  
 690 695 700  
 Val Lys Lys Ile Glu Lys Lys Asn Phe Pro Phe Glu Arg Leu Tyr Asp  
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 Lys Thr Ile His Lys Tyr Val His Leu Phe Pro Lys Leu Glu Leu Ser  
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His Glu Tyr Phe Leu Leu Lys Ala Lys Tyr Ala Gln Asp Glu His Leu		
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Ile	Ala	Pro	Leu	Phe	Pro	Gln	Lys	Arg	Glu	Glu	Gly	Trp	Trp	Val	Val
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 Gly Ala His Asn Tyr Thr Leu Tyr Phe Met Ser Asp Ala Tyr Met Gly  
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<211> 586

<212> DNA

<213> Homo sapiens

<400> 2235

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<211> 123

<212> PRT

<213> Homo sapiens

<400> 2236

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 Asp Pro Lys Asp Gly Leu Asn Phe Asn Leu Glu Leu Glu Arg Gln Thr  
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 Leu Asp Gln Asp Pro Leu Ser Lys Val Leu Ala Gly Val Ala Leu Gly  
                     50                      55                      60  
 Gly Tyr Ser Val Pro Arg Leu His Pro Arg Gln Val Pro Gly Arg Gly  
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 Glu Ala Gly Pro Gly Ala Gly Ala Ala Val Glu Gly Leu His Cys Ala

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 Phe Pro Thr Leu Leu Pro Thr Arg Leu Leu Leu Thr Gly Gly Leu Ala  
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 Gln Leu Glu Pro Ile Val Gln Gln Val Leu Ala Glu Glu Pro Leu Ala  
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 Pro His Cys Pro Thr Pro Asp Gln Gly Asp Ala Leu Glu Glu Gly Leu  
 65 70 75 80  
 Asp Leu Ser Ser Ser Leu Ser Ala Pro Asp His Phe Gln Gly Leu Ser  
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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2239

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&lt;210&gt; 2240

&lt;211&gt; 207

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2240

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1				5					10					15	
Leu	Ser	His	Pro	Ser	His	Ser	Arg	Pro	Gly	Pro	Met	Val	Thr	Pro	His
			20					25					30		
Asn	Lys	Ala	Lys	Ser	Pro	Gly	Val	Arg	Gln	Pro	Gly	Ser	Ser	Ser	Ser
		35				40						45			
Ser	Ala	Pro	Gly	Gln	Pro	Ser	Thr	Gly	Val	Ala	Arg	Pro	Thr	Val	Ser
	50					55					60				
Ser	Gly	Pro	Val	Pro	Arg	Gln	Asn	Gly	Ser	Ser	Ser	Ser	Gly	Pro	
65				70				75					80		
Glu	Arg	Ser	Ile	Ser	Gly	Ser	Lys	Lys	Pro	Thr	Asn	Asp	Ser	Asn	Pro
			85					90					95		
Ser	Arg	Arg	Thr	Val	Ser	Gly	Thr	Cys	Gly	Pro	Gly	Gln	Pro	Ala	Ser
			100					105				110			
Ser	Ser	Gly	Gly	Pro	Gly	Arg	Pro	Ile	Ser	Gly	Ser	Val	Ser	Ser	Ala
		115				120					125				
Arg	Pro	Leu	Gly	Ser	Ser	Arg	Gly	Pro	Gly	Arg	Pro	Val	Ser	Ser	Pro
	130					135					140				
His	Glu	Leu	Arg	Arg	Pro	Val	Ser	Gly	Leu	Gly	Pro	Pro	Gly	Arg	Ser
145				150						155				160	
Val	Ser	Gly	Pro	Gly	Arg	Ser	Ile	Ser	Gly	Pro	Ile	Pro	Ala	Gly	Arg

[illegible]

```
<210> 2241
<211> 656
<212> DNA
<213> Homo sapiens
```

```

<400> 2241
nnacgcgtga agggcagcag caacaccacg gagtgtgttc ccgtgcccac ctccgagcac
60
gtggccgaga tcgtgggcag gcaaggctgc aagattaagg ccttgagggc caagaccaac
120
acctacatta gaaccccggg aaggggcgag gaaccagtgt tcatgggtgac agggcgacgg
180
gaggacgtgg ccacagcccg gcgggaaatc atctcagcag cggagcactt ctccatgac
240
cgtgcctccc gcaacaagtc aggcgcgcgc tttggtgtgg ctctgtctct gcccgccag
300
gtgaccatcc gtgtgcgggt gccctaccgc gtggtggggc tgggtggtgg ccccaaaggg
360
gcaaccatca agcgcattca gcagcaaacc aacacatata ttatcacacc aagccgtgac
420
cgcgaccccg tgttcgagat cacgggtgcc ccaggcaacg tggagcgtgc gcgcgaggag
480
atcgagacgc acatcgcggt gcgcactggc aagatcctcg agtacaacaa tgaaaacgac
540
ttcctggcgg ggagccccga cgcagcaatc gatagccgct actccgacgc ctggcgggtg
600
caccagcccg gctgcaagcc cctctccacc ttccggcaga acagcctggg ctgcag
656

```

```
<210> 2242
<211> 218
<212> PRT
<213> Homo sapiens
```

<400> 2242																
Xaa	Arg	Val	Lys	Gly	Ser	Ser	Asn	Thr	Thr	Glu	Cys	Val	Pro	Val	Pro	
1				5					10					15		
Thr	Ser	Glu	His	Val	Ala	Glu	Ile	Val	Gly	Arg	Gln	Gly	Cys	Lys	Ile	
			20					25					30			
Lys	Ala	Leu	Arg	Ala	Lys	Thr	Asn	Thr	Tyr	Ile	Arg	Thr	Pro	Gly	Arg	
		35					40					45				
Gly	Glu	Glu	Pro	Val	Phe	Met	Val	Thr	Gly	Arg	Arg	Glu	Asp	Val	Ala	
	50					55					60					
Thr	Ala	Arg	Arg	Glu	Ile	Ile	Ser	Ala	Ala	Glu	His	Phe	Ser	Met	Ile	
65					70					75					80	
Arg	Ala	Ser	Arg	Asn	Lys	Ser	Gly	Ala	Ala	Phe	Gly	Val	Ala	Pro	Ala	
				85					90					95		
Leu	Pro	Gly	Gln	Val	Thr	Ile	Arg	Val	Arg	Val	Pro	Tyr	Arg	Val	Val	



```

          100          105          110
Gly Leu Val Val Gly Pro Lys Gly Ala Thr Ile Lys Arg Ile Gln Gln
          115          120          125
Gln Thr Asn Thr Tyr Ile Ile Thr Pro Ser Arg Asp Arg Asp Pro Val
          130          135          140
Phe Glu Ile Thr Gly Ala Pro Gly Asn Val Glu Arg Ala Arg Glu Glu
          145          150          155          160
Ile Glu Thr His Ile Ala Val Arg Thr Gly Lys Ile Leu Glu Tyr Asn
          165          170          175
Asn Glu Asn Asp Phe Leu Ala Gly Ser Pro Asp Ala Ala Ile Asp Ser
          180          185          190
Arg Tyr Ser Asp Ala Trp Arg Val His Gln Pro Gly Cys Lys Pro Leu
          195          200          205
Ser Thr Phe Arg Gln Asn Ser Leu Gly Cys
          210          215

```

<210> 2243  
 <211> 384  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2243
gaattcagca tttaaagtgc actcggtggc atgcaatttg ctgtcatgaa aacgactgtg
60
gattcatttc ctggtaagaa tcttctgact tattgagctg catgtcagaa gcaaaaagca
120
aaaaaaccaa atatgtacat aaaacagtgt tatcattcct taaaagagaa ggaaaataaa
180
tccctaaata atgtggactg gaacacagaa atccaaggct ggcgcacagg gtctctggctg
240
ggatggcatc cggggagctg ctgctgggga cgtgcttgcc ggcacaggtc aggggagccg
300
ggttctgcct cctccttgcc cactctcttt gcgccctccc tgtgctcgcc tgtcttggtt
360
tacctcccat cctgggccct tgga
384

```

<210> 2244  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2244
Met Gly Gly Lys Thr Arg Gln Ala Ser Thr Gly Arg Ala Gln Arg Glu
1      5      10      15
Trp Ala Arg Arg Arg Gln Asn Pro Ala Pro Leu Thr Cys Ala Gly Lys
20     25     30
His Val Pro Ser Ser Ser Ser Pro Asp Ala Ile Pro Ala Arg Thr Arg
35     40     45
Ala Ala Ser Leu Gly Phe Leu Cys Ser Ser Pro His Tyr Leu Gly Ile
50     55     60
Tyr Phe Pro Ser Leu Leu Arg Asn Asp Asn Thr Val Leu Cys Thr Tyr
65     70     75     80
Leu Val Phe Leu Leu Phe Ala Ser Asp Met Gln Leu Asn Lys Ser Glu

```

85 90 95  
 Asp Ser Tyr Gln Glu Met Asn Pro Gln Ser Phe Ser  
 100 105

<210> 2245  
 <211> 632  
 <212> DNA  
 <213> Homo sapiens

<400> 2245  
 acgctgacga ttaccgtcaa ggctgggtgtg gtgagcgtg atctgcacga gcggacgtct  
 60  
 tcgagagaag aggtcggacg cgagaggctc aactatgggc acaccttggc ccacgtatt  
 120  
 gaggccacaca agcatttcac gtggcgtcat ggcgaggctg acgcggtggg catggtgttt  
 180  
 gcggccgaac tgtcgcaccg gtacctggga ctgtccgatg aggtcgttgc gcgcaccgc  
 240  
 actatcctgt ctgagatcgg attgcctgtt acctgtgacg agattaagtg ggcagatctg  
 300  
 cgcaagacga tgaactgtga caagaaaacc agggtagacc cgcagaccgg gcgtcaagtg  
 360  
 ttgcggtttg tcggtattca caaaccgggt caggctcgcca tgatcgtcga ccctgacgag  
 420  
 gccgcttttag ccgagtgcga cgaccggtgt tccgcacggt aaaaacgttc ggaaatgaac  
 480  
 atgtggctgc gggtcagtcg gcattcaggc ctccgtgacg ccgtcgaccc caagtgatgt  
 540  
 gacgattcgg gaaatatctt gttgggcact cttgagcctc gcctgattcc ccatacccca  
 600  
 cttaagtcca gtatcgacgg catgaatccg ga  
 632

<210> 2246  
 <211> 153  
 <212> PRT  
 <213> Homo sapiens

<400> 2246  
 Thr Arg Ala Ile Thr Val Lys Ala Gly Val Val Ser Ala Asp Leu His  
 1 5 10 15  
 Glu Arg Thr Ser Ser Arg Glu Glu Val Gly Arg Glu Arg Leu Asn Tyr  
 20 25 30  
 Gly His Thr Leu Ala His Ala Ile Glu Ala His Lys His Phe Thr Trp  
 35 40 45  
 Arg His Gly Glu Ala Asp Ala Val Gly Met Val Phe Ala Ala Glu Leu  
 50 55 60  
 Ser His Arg Tyr Leu Gly Leu Ser Asp Glu Val Val Ala Arg Thr Arg  
 65 70 75 80  
 Thr Ile Leu Ser Glu Ile Gly Leu Pro Val Thr Cys Asp Glu Ile Lys  
 85 90 95  
 Trp Ala Asp Leu Arg Lys Thr Met Asn Val Asp Lys Lys Thr Arg Val  
 100 105 110  
 Asp Pro Gln Thr Gly Arg Gln Val Leu Arg Phe Val Gly Ile His Lys

115 120 125  
 Pro Gly Gln Val Ala Met Ile Val Asp Pro Asp Glu Ala Ala Leu Ala  
 130 135 140  
 Glu Cys Tyr Asp Arg Cys Ser Ala Arg  
 145 150

<210> 2247  
 <211> 324  
 <212> DNA  
 <213> Homo sapiens

<400> 2247  
 gggcggttcgc ctccaggggtt ctccccgaca ctggatgccca acctgcccag gggcagaagg  
 60  
 gaggttgggc gtggggagtg ccgggtacag tcagagttgc caggacagtt tggagcagtg  
 120  
 cctcttaate ttggccgcac agcacctggg agctttaaat agacccccac gccctgggag  
 180  
 ccccccacgc tgacccaccc gatctcagct ctgcctttcc cgctctctg ctgggttgca  
 240  
 taagccagcg attcccaacc ccggctgtac ctggaagcta ccccaggagc ttctggagaa  
 300  
 tgtgccgtgt gagccatccc cctg  
 324

<210> 2248  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 2248  
 Met Ala His Thr Ala His Ser Pro Glu Ala Pro Gly Val Ala Ser Arg  
 1 5 10 15  
 Tyr Ser Arg Gly Trp Glu Ser Leu Ala Tyr Ala Thr Gln Gln Arg Gly  
 20 25 30  
 Gly Lys Gly Arg Ala Glu Ile Gly Trp Val Ser Gly Gly Gly Ala Gln  
 35 40 45  
 Gly Val Gly Val Tyr Leu Lys Leu Pro Gly Ala Val Arg Pro Arg Leu  
 50 55 60  
 Arg Gly Thr Ala Pro Asn Cys Pro Gly Asn Ser Asp Cys Thr Arg His  
 65 70 75 80  
 Ser Pro Arg Pro Thr Ser Leu Leu Pro Leu Gly Arg Leu Ala Ser Ser  
 85 90 95  
 Val Gly Glu Asn Pro Gly Gly Glu Arg  
 100 105

<210> 2249  
 <211> 394  
 <212> DNA  
 <213> Homo sapiens

<400> 2249  
 gaaaaccgga taacaggggtg tatacaagcc tctgagttct gggagcaaca accagctcaa  
 60

cccgcaaggg aaagtgagaa agcaattaag ttgggaaccg cgggggttttc ccattccac  
 120  
 ggtggaacc gcggccagtg aattgaaatc cgcttcctta aggcgaaatg ggcccttaaa  
 180  
 aggcaaggtc aaccgcccgc cagtgtgatg gaatttgcaa gaattcggtt tagcacctc  
 240  
 ccggcttttc tcccgaccgc gtgcagggtg ggctgcgctg ggcctgggag gaactgggag  
 300  
 ctgggggctc atgtcctgta taaaggggct gcaggggcgc tgtctcccc cagaagactg  
 360  
 gccacatggg gacaggcctc ctgggggcag atct  
 394

<210> 2250

<211> 104

<212> PRT

<213> Homo sapiens

<400> 2250

Met	Ser	Pro	Gln	Leu	Pro	Val	Pro	Pro	Arg	Pro	Ser	Ala	Ala	His	Pro
1			5						10					15	
Ala	Arg	Gly	Arg	Glu	Lys	Ser	Arg	Glu	Gly	Ala	Lys	Pro	Asn	Ser	Cys
		20						25				30			
Lys	Phe	His	His	Thr	Gly	Gly	Arg	Leu	Thr	Leu	Pro	Phe	Lys	Gly	Pro
		35				40						45			
Phe	Arg	Leu	Lys	Glu	Ala	Asp	Phe	Asn	Ser	Leu	Ala	Ala	Val	Ser	Thr
	50					55				60					
Val	Gly	Met	Gly	Lys	Pro	Arg	Gly	Ser	Gln	Leu	Asn	Cys	Phe	Leu	Thr
65				70					75					80	
Phe	Pro	Cys	Gly	Leu	Ser	Trp	Leu	Leu	Leu	Pro	Glu	Leu	Arg	Gly	Leu
			85					90						95	
Tyr	Thr	Pro	Cys	Tyr	Pro	Val	Phe								
			100												

<210> 2251

<211> 654

<212> DNA

<213> Homo sapiens

<400> 2251

acgcgtactt attccgccacc atgattatga ccagtgtttc cagtccgttc agttgttgca  
 60  
 gtggaatagt cagggttaaat ttaatgtgac cgtttatcgc aatctgccga ccactcgcca  
 120  
 ttcaatcatg acttcgtgat aaaagattga gtgtgaggtt ataacgccga agcggtaaaa  
 180  
 attttaattt ttgccgctga ggggttgacc aagcgaagcg cggtagggtt tctgcttagg  
 240  
 agtttaatca tgtttcagac ttttatttct cgccataatt caaacttttt ttctgataag  
 300  
 ctggtttctca cttctgttac tccagcttct tcggcacctg ttttacagac acctaaagct  
 360  
 acatcgtaaa cgttatatatt tgatagtttg acggttaatg ctggtaatgg tggtttttctt  
 420

cattgcattc agatggatac atctgtcaac gccgctaac aggttggttc tgttggtgct  
 480  
 gatattgctt ttgatgccga ccctaaattt ttgacctgtt tggttcgctt tgagtcttct  
 540  
 tcgggtccga ctaccctccc gactgcctat gatgtttatc ctttggaagg tcgccatgat  
 600  
 ggtgggttatt ataccgtcaa ggactgtgtg actattgacg tccttcctcg tacg  
 654

<210> 2252

<211> 135

<212> PRT

<213> Homo sapiens

<400> 2252

Met	Phe	Gln	Thr	Phe	Ile	Ser	Arg	His	Asn	Ser	Asn	Phe	Phe	Ser	Asp
1				5					10					15	
Lys	Leu	Val	Leu	Thr	Ser	Val	Thr	Pro	Ala	Ser	Ser	Ala	Pro	Val	Leu
			20					25					30		
Gln	Thr	Pro	Lys	Ala	Thr	Ser	Ser	Thr	Leu	Tyr	Phe	Asp	Ser	Leu	Thr
			35				40					45			
Val	Asn	Ala	Gly	Asn	Gly	Gly	Phe	Leu	His	Cys	Ile	Gln	Met	Asp	Thr
	50				55					60					
Ser	Val	Asn	Ala	Ala	Asn	Gln	Val	Val	Ser	Val	Gly	Ala	Asp	Ile	Ala
65					70				75					80	
Phe	Asp	Ala	Asp	Pro	Lys	Phe	Phe	Ala	Cys	Leu	Val	Arg	Phe	Glu	Ser
			85						90					95	
Ser	Ser	Val	Pro	Thr	Thr	Leu	Pro	Thr	Ala	Tyr	Asp	Val	Tyr	Pro	Leu
			100					105					110		
Asp	Gly	Arg	His	Asp	Gly	Gly	Tyr	Tyr	Thr	Val	Lys	Asp	Cys	Val	Thr
		115					120					125			
Ile	Asp	Val	Leu	Pro	Arg	Thr									
		130				135									

<210> 2253

<211> 327

<212> DNA

<213> Homo sapiens

<400> 2253

ggatcctgct gggcctcttt tacgtgatgt tgacccagcc gctggtgcgc attattcgcg  
 60  
 cactgagcac cagcaagcag gcccgccctgg attgccacc gggtcacgaa aacgatgaaa  
 120  
 tcggcggtatt ggtcaacgtc gcccaaccagc aattcgacaa tatggaaaacc gaaatcgagc  
 180  
 agcgccgcca cgccgaggac cgctccaccg aatacctggg ccaactggaa gatatcgctt  
 240  
 ccgcacgcac cctggagctc aaggccagca accaaccgctt gagccaatcc aacgatgagc  
 300  
 tggaagcggc aaagttgacc gccttgg  
 327

<210> 2254

<211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 2254  
 Met Leu Thr Gln Pro Leu Val Arg Ile Ile Arg Ala Leu Ser Thr Ser  
 1 5 10 15  
 Lys Gln Ala Arg Leu Asp Cys Pro Pro Gly His Glu Asn Asp Glu Ile  
 20 25 30  
 Gly Val Leu Val Asn Val Ala Asn Gln Gln Phe Asp Asn Met Glu Thr  
 35 40 45  
 Glu Ile Glu Gln Arg Arg His Ala Glu Asp Arg Leu Thr Glu Tyr Leu  
 50 55 60  
 Gly Gln Leu Glu Asp Ile Val Ser Ala Arg Thr Leu Glu Leu Lys Ala  
 65 70 75 80  
 Ser Asn Gln Arg Leu Ser Gln Ser Asn Asp Glu Leu Glu Ala Ala Lys  
 85 90 95  
 Leu Thr Ala Leu  
 100

<210> 2255  
 <211> 357  
 <212> DNA  
 <213> Homo sapiens

<400> 2255  
 nngctagcac atgagaagtg tgaagtttat actttgcttg ggcgatcacg ccgttttcca  
 60  
 aatatggctc atgcaacttc tggccaaagg ggtcacattg agcgtgctgc tatcaatgct  
 120  
 cctgtacagg gcagtgccgc tgatgttgct atgtgtgcaa tgcttgagat agacaggaat  
 180  
 actcgtctta aggagcttgg ttggacgcta ctcttgccagg tgcattgatga agtgatactg  
 240  
 gaagggcctt cagagtctgc ggagtnggcc aagtcctatg ttgttgagtg catgtctaag  
 300  
 cccttctatg gcaccaatat cctgagggtc gaccttgctg ttgatgcaa gtgtgca  
 357

<210> 2256  
 <211> 119  
 <212> PRT  
 <213> Homo sapiens

<400> 2256  
 Xaa Leu Ala His Glu Lys Cys Glu Val Tyr Thr Leu Leu Gly Arg Ser  
 1 5 10 15  
 Arg Arg Phe Pro Asn Met Ala His Ala Thr Ser Gly Gln Arg Gly His  
 20 25 30  
 Ile Glu Arg Ala Ala Ile Asn Ala Pro Val Gln Gly Ser Ala Ala Asp  
 35 40 45  
 Val Ala Met Cys Ala Met Leu Glu Ile Asp Arg Asn Thr Arg Leu Lys  
 50 55 60  
 Glu Leu Gly Trp Thr Leu Leu Leu Gln Val His Asp Glu Val Ile Leu

```

65          70          75          80
Glu Gly Pro Ser Glu Ser Ala Glu Xaa Ala Lys Ser Ile Val Val Glu
      85          90          95
Cys Met Ser Lys Pro Phe Tyr Gly Thr Asn Ile Leu Arg Val Asp Leu
      100        105        110
Ala Val Asp Ala Lys Cys Ala
      115

```

<210> 2257  
 <211> 626  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2257
nnaatgacaa aaaatatgaa ccaaaatagt gacagtggca gtacaaataa ctataaaagc
60
ctgaaaccta aattagaaaa tctgagttct ttaccaccag attctgacag aacatcagaa
120
gtatatctac atgaagaatt acagcaggac atgcaaaagt ttaagaatga ggtcaacaca
180
ttagaagaag agttcctggc tttgaagaaa gaaaatgttc aacttcataa agaggttgaa
240
gaagaaatgg agaagcacag aagtaatagc acagaattat caggaaccct aactgatggg
300
actactgttg gcaatgatga tgatggacta aatcagcaga ttcctaggaa ggaaaatgaa
360
gagcatgaca ggccctgcaga taaaacagct aatgaaaaga acaagggtcaa aaaccaaata
420
tatactgagg ctgactttgc tgactcaatg gagccatctg aaatagcctc agaggattgt
480
gaattgtctc actctgttta tgagaatttt atgttgctga ttgaacaact tagaatggag
540
tataaaggta ggaccactgc ataaatgcaa ggccctttga tgtatcctgc agtaatgtgt
600
gtatacattg ctgagaactg acgcgt
626

```

<210> 2258  
 <211> 187  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2258
Xaa Met Thr Lys Asn Met Asn Gln Asn Ser Asp Ser Gly Ser Thr Asn
1      5      10      15
Asn Tyr Lys Ser Leu Lys Pro Lys Leu Glu Asn Leu Ser Ser Leu Pro
20     25     30
Pro Asp Ser Asp Arg Thr Ser Glu Val Tyr Leu His Glu Glu Leu Gln
35     40     45
Gln Asp Met Gln Lys Phe Lys Asn Glu Val Asn Thr Leu Glu Glu Glu
50     55     60
Phe Leu Ala Leu Lys Lys Glu Asn Val Gln Leu His Lys Glu Val Glu
65     70     75     80
Glu Glu Met Glu Lys His Arg Ser Asn Ser Thr Glu Leu Ser Gly Thr

```

```
<210> 2259
<211> 425
<212> DNA
<213> Homo sapiens
```

```
<210> 2260
<211> 141
<212> PRT
<213> Homo sapiens
```

```

<400> 2260
Met Lys Asn Arg Leu Gln Val Thr Glu Ala Thr Val Met Val Thr Val
 1          5          10          15
Leu Ser Gly Pro Arg Gln Gly Asp Lys Thr Ile Tyr Ala Glu Asp Gly
 20          25          30
Arg Val Leu Tyr Gly Thr Pro Ile Glu Gly Phe Thr Val Asp Lys Ala
 35          40          45
Lys Leu Asn Ser Leu Cys Met Val Gly Glu Met Glu Cys Phe Val Gln
 50          55          60
Pro Val Glu Asn Asp Pro Ser Val Leu Val Leu Gly Ala Gly His Val
 65          70          75          80
Ser Arg Ala Ile Thr Asp Leu Leu Leu Phe Ile Gly Cys Arg Val Thr

```



```
<210> 2261
<211> 660
<212> DNA
<213> Homo sapiens
```

```
<210> 2262
<211> 139
<212> PRT
<213> Homo sapiens
```

```

<400> 2262
Met Pro Gly Gly Ser Ser Thr Ser Phe Thr Glu Arg Cys Ser Ile Gly
 1          5          10
Pro Asn Gly Cys Pro Cys Gly Gln Pro Leu Tyr Leu Val Met Gly Arg
 20          25          30
Asn Pro Met Ser Ser Arg Asn Gly Phe Gln Ala Thr Asp Leu Ala Leu
 35          40          45
Ile Ala Val Phe Ala Ala Leu Ile Ala Val Leu Ala Val Ile Pro Pro
 50          55          60
Met Phe Met Val Gly Ala Val Pro Phe Ala Leu Gln Met Val Ala Val
 65          70          75
Met Leu Ala Pro Met Val Leu Gly Ser Ile Arg Gly Gly Cys Ala Val

```

[illegible]

```
<210> 2263
<211> 491
<212> DNA
<213> Homo sapiens
```

```

<400> 2263
naccgcttcc cggctgcaccg aggc aaagc aaaagtaagc aggggtgccg tagtccccgt
60
tcccaccgcg gtatggctgg gtcactgctg acagatggcg tccccctgct gatctttccg
120
gagggcaccc ggtctcgcac cggcgcaatg ggcaccttca aacctggggc tgccgcattg
180
gctatttcac gtgggggttc gggttatccc attgctttag taggagcatg ggcgggtatg
240
ccgtccgagc aagccagggt accaaaagga cgtccattgg tccacgtggc tattggacac
300
cctatggacc ctgttcccg cgagatcgcc caccaattct ccgaacggat tcgtgccag
360
gtcattgagt tgcacgacca aaccgcctcg gcctacggca tgccaaccct tgacgaatac
420
ggacgccacc gcgcgctaag ccaggcctcc gagagcggcg acaccgcac caccaaccac
480
tcgacgtgca c
491

```

```
<210> 2264
<211> 163
<212> PRT
<213> Homo sapiens
```

<400> 2264																
Xaa	Ala	Phe	Pro	Val	Asp	Arg	Gly	Lys	Gly	Lys	Ser	Lys	Gln	Gly	Ala	
1				5					10					15		
Arg	Ser	Pro	Arg	Ser	His	Arg	Gly	Met	Ala	Gly	Ser	Leu	Leu	Thr	Asp	
			20					25					30			
Gly	Val	Pro	Leu	Leu	Ile	Phe	Pro	Glu	Gly	Thr	Arg	Ser	Arg	Thr	Gly	
		35					40					45				
Ala	Met	Gly	Thr	Phe	Lys	Pro	Gly	Ala	Ala	Ala	Leu	Ala	Ile	Ser	Arg	
	50					55					60					
Gly	Val	Pro	Val	Ile	Pro	Ile	Ala	Leu	Val	Gly	Ala	Trp	Ala	Ala	Met	
65				70					75						80	
Pro	Ser	Glu	Gln	Ala	Arg	Leu	Pro	Lys	Gly	Arg	Pro	Leu	Val	His	Val	
				85					90					95		
Ala	Ile	Gly	His	Pro	Met	Asp	Pro	Val	Pro	Gly	Glu	Ile	Ala	His	Gln	
			100					105					110			
Phe	Ser	Glu	Arg	Ile	Arg	Arg	Gln	Val	Ile	Glu	Leu	His	Asp	Gln	Thr	

[illegible]

```
<210> 2265
<211> 328
<212> DNA
<213> Homo sapiens
```

```
<400> 2265
ccatgggaat aggcacaacac ggatggatct actgtataac ttgcctgccca tcaggaaaga
60
gtcaacacgg cagacacatg ctggcagaaa ccctgctgga gttgcccttg agcattgatg
120
cataccaccc gagaggagga gaggggtggtg ggagaaatca gatcagagtt caaaatgcac
180
cggaagggtc cggaatgta agactgcacc ttgcaggaac tgtcaatgcc actaccaata
240
tcactcactt acgtcaagca cttgagagca gctgcgaaca caattctctg actcctaacc
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tttagcacgt gactgggacc actggaca
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<210> 2266
<211> 100
<212> PRT
<213> Homo sapiens
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<400> 2266
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Ser Gly Lys Ser Gln His Gly Arg His Met Leu Ala Glu Thr Leu Leu
 20          25          30
Glu Leu Pro Leu Ser Ile Asp Ala Tyr His Pro Arg Gly Glu Gly
 35          40          45
Gly Gly Arg Asn Gln Ile Arg Val Gln Asn Ala Pro Glu Gly Leu Gly
 50          55          60
Asn Val Arg Leu His Leu Ala Gly Thr Val Asn Ala Thr Thr Asn Ile
 65          70          75          80
Thr His Leu Arg Gln Ala Leu Glu Ser Ser Cys Glu His Asn Ser Leu
 85          90          95
Thr Pro Asn Leu
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<210> 2267
<211> 370
<212> DNA
<213> Homo sapiens
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<400> 2267

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 agcagtgacc ggagtggcca atctgtacag ggacaggctc aagggcacag caactcaggg  
 240  
 gacagagatg gtgaagcagg catgtcctaa agcctccctt cttaaccctg accttgaagg  
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 370

<210> 2268

<211> 91

<212> PRT

<213> Homo sapiens

<400> 2268

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Ser	Gln	Lys	Gln	Val	Thr	Glu	Gly	Ala	Thr	Thr	Glu	Leu	His	Ser	Arg
			20					25					30		
Trp	Gly	Val	Lys	Pro	Tyr	Pro	Pro	Lys	Thr	Ala	Val	Thr	Gly	Val	Ala
		35				40						45			
Asn	Leu	Tyr	Arg	Asp	Arg	Leu	Lys	Ala	Thr	Ala	Thr	Gln	Gly	Thr	Glu
	50					55					60				
Met	Val	Lys	Gln	Ala	Cys	Pro	Lys	Ala	Ser	Leu	Leu	Asn	Pro	Asp	Leu
65					70					75				80	
Glu	Gly	Gln	Glu	Thr	Ser	His	Leu	Arg	Met	Leu					
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<210> 2269

<211> 507

<212> DNA

<213> Homo sapiens

<400> 2269

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 caccacgacc cggtcgtcat gatccgtgcc tatgaacagc tcgccgcca atgcgattat  
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<210> 2270  
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 <212> PRT  
 <213> Homo sapiens

<400> 2270  
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 20 25 30  
 Ile Gly Val Asn Ala Gly Ser Leu Asp Lys Arg Leu Leu Asp Lys Tyr  
 35 40 45  
 Gly Ala Pro Thr Ala Glu Ala Met Val Glu Ser Ala Leu Trp Glu Ala  
 50 55 60  
 Ser Leu Phe Glu Gln Tyr Gly Phe Arg Asp Phe Lys Ile Ser Val Lys  
 65 70 75 80  
 His His Asp Pro Val Val Met Ile Arg Ala Tyr Glu Gln Leu Ala Ala  
 85 90 95  
 Lys Cys Asp Tyr Pro Leu His Leu Gly Val Thr Glu Ala Gly Pro Ala  
 100 105 110  
 Phe Gln Gly Thr Ile Lys Ser Ala Val Ala Phe Gly His Leu Leu Ala  
 115 120 125  
 Glu Gly Ile Gly Asp Thr Ile Arg Val Ser Leu Ser Ala Asp Pro Val  
 130 135 140  
 Glu Glu Val Lys Val Gly Ile Lys Ile Leu Glu Ser Leu Asn Leu Arg  
 145 150 155 160  
 Pro Arg Gly Leu Glu Ile Val Ser Cys  
 165

<210> 2271  
 <211> 573  
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<400> 2271  
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 180  
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 360  
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573

<210> 2272  
<211> 191  
<212> PRT  
<213> Homo sapiens

<400> 2272  
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20 25 30  
Leu Leu Lys Thr Arg Thr Ser Glu Glu Gly Met Ala Pro Leu Thr Ser  
35 40 45  
Asp Ala Val Ala Arg Leu Ala Thr Tyr Ser Ala Arg Leu Ala Asp His  
50 55 60  
Gln Gly Arg Val Ser Ala Arg Ile Gly Asp Leu Phe Gln Leu Val Ser  
65 70 75 80  
Glu Ala Asp Phe Ile Arg His Leu Ala Gly Asp Glu Met Thr Asp Ala  
85 90 95  
Gly His Ile Glu Arg Ala Leu Lys Ala Lys Ala Thr Arg Thr Gly Arg  
100 105 110  
Val Ser Ala Arg Ile Leu Asp Asp Met Leu Ala Gly Val Ile Leu Ile  
115 120 125  
Asp Thr Ala Gly Ala Ala Val Gly Lys Cys Asn Gly Leu Thr Val Leu  
130 135 140  
Glu Val Gly Asp Ser Ala Phe Gly Val Pro Ala Arg Ile Ser Ala Thr  
145 150 155 160  
Val Tyr Pro Gly Gly Ser Gly Ile Val Asp Ile Glu Arg Glu Val Asn  
165 170 175  
Leu Gly Gln Pro Ile His Ser Lys Gly Val Met Ile Leu Thr Gly  
180 185 190

<210> 2273  
<211> 4355  
<212> DNA  
<213> Homo sapiens

<400> 2273  
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gagagggagg aggaagtgat cacctgtttt gagagggcct cctggatcgc tcaggtgttc  
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aacctgaaga aggggaacat cgtgaagggc atgagagagc tccgggaggt gctgcggact  
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<210> 2274

<211> 158

<212> PRT

<213> Homo sapiens

<400> 2274

Ser	Phe	Gln	His	Ala	Ser	Gly	Phe	Leu	Gly	Glu	His	Ser	Pro	Gly	Gly
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Gln	Arg	Ser	Cys	Arg	Gly	Gly	Leu	Ser	Leu	Glu	Arg	Leu	Pro	Asn	Ser
			20				25						30		
Ile	Ala	Ser	Arg	Phe	Arg	Leu	Thr	Glu	Arg	Glu	Glu	Glu	Val	Ile	Thr
			35				40						45		
Cys	Phe	Glu	Arg	Ala	Ser	Trp	Ile	Ala	Gln	Val	Phe	Leu	Gln	Glu	Leu
			50				55				60				
Glu	Lys	Thr	Thr	Asn	Asn	Ser	Thr	Ser	Arg	His	Leu	Lys	Gly	Cys	His
					70					75				80	
Pro	Leu	Asp	Tyr	Glu	Leu	Thr	Tyr	Phe	Leu	Glu	Ala	Ala	Leu	Gln	Ser
				85					90					95	
Ala	Tyr	Val	Lys	Asn	Leu	Lys	Lys	Gly	Asn	Ile	Val	Lys	Gly	Met	Arg
			100					105					110		
Glu	Leu	Arg	Glu	Val	Leu	Arg	Thr	Val	Glu	Thr	Lys	Ala	Thr	Gln	Asn
			115				120					125			
Phe	Lys	Val	Met	Ala	Ala	Lys	His	Leu	Ala	Gly	Val	Leu	Leu	His	Ser
			130				135					140			
Leu	Ser	Gly	Val	Leu	Leu	Glu	Pro	Pro	Val	Pro	Pro	Ser	Ala		

145

150

155

&lt;210&gt; 2275

&lt;211&gt; 608

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2275

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 aaggagaaca ggagacatca aaaggaagaa ccaggctgtg ccccaacctt ttttccaaac  
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 240  
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 480  
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 600  
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 608

&lt;210&gt; 2276

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2276

Ser	Thr	Asn	Asn	Thr	Lys	Glu	Asn	Arg	Arg	Pro	Gln	Lys	Glu	Glu	Pro
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Gly	Cys	Ala	Pro	Thr	Phe	Phe	Pro	Asn	Gln	Ser	Ser	Gly	Phe	Thr	Thr
			20					25					30		
Pro	Thr	Ala	Met	Thr	Pro	Pro	Val	Leu	Thr	Thr	Ala	Glu	Thr	Ser	Val
			35				40					45			
Lys	Pro	Ser	Val	Ser	Ala	Phe	Thr	His	Ser	Pro	Pro	Glu	Asn	Thr	Thr
			50				55				60				
Gly	Ile	Ser	Ser	Thr	Ile	Ser	Phe	His	Ser	Arg	Thr	Leu	Asn	Leu	Thr
65					70					75				80	
Asp	Val	Ile	Glu	Glu	Leu	Ala	Gln	Ala	Ser	Thr	Gln	Thr	Leu	Lys	Ser
			85						90					95	
Thr	Ile	Ala	Ser	Glu	Thr	Thr	Leu	Ser	Ser	Lys	Ser	His	Gln	Ser	Thr
			100					105					110		
Thr	Thr	Arg	Lys	Ala	Ile	Ile	Arg	His	Ser	Thr	Ile	Pro	Pro	Phe	Leu
			115				120					125			
Ser	Ser	Ser	Ala	Thr	Leu	Ile	Pro	Val	Pro	Ile	Ser	Pro	Pro	Phe	Thr

130                      135                      140  
 Gln Arg Ala Val Thr Asp Asn Val Ala Thr Pro Ile Ser Gly Leu Met  
 145                      150                      155                      160  
 Thr Asn Thr Val Val Lys Leu  
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<210> 2277  
 <211> 640  
 <212> DNA  
 <213> Homo sapiens

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 gctggcatgg gccgttcttc ccctgggact gcacagcctg gaccnccac caagtccctgt  
 240  
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 420  
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 480  
 cccatggccc agcgtcccag tgtgtgctccc acggcccagc ctgaccgacc cgggtgtgctg  
 540  
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<210> 2278  
 <211> 95  
 <212> PRT  
 <213> Homo sapiens

<400> 2278  
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 Gly Arg Ser Ser Pro Gly Thr Ala Gln Pro Gly Pro Xaa Thr Lys Ser  
                     20                      25                      30  
 Cys Cys Pro Pro Trp Leu Ser Ser Pro Pro Ala Ala Cys Leu Pro Ser  
                     35                      40                      45  
 Ser Leu Leu Ser Pro Tyr Pro Val Leu Pro Ser Pro Ser Cys Lys Val  
                     50                      55                      60  
 His Ala Thr Pro Gln Glu Pro Gln Arg Leu Ser Ser Asp Pro Thr  
 65                      70                      75                      80  
 Leu Ser Ala Pro Thr Leu Pro Pro His Gln Ile Leu Ser Thr Pro  
                     85                      90                      95

<210> 2279  
 <211> 331  
 <212> DNA  
 <213> Homo sapiens

<400> 2279  
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 120  
 ttccggacca ggggatgca caggggcca gagaatgcat ggaatcagag ggcactggcc  
 180  
 ccactcactc cccatcatcg cctgcagtgt tgttttcatt cctgcactgt gcctttgttt  
 240  
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 300  
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 331

<210> 2280  
 <211> 91  
 <212> PRT  
 <213> Homo sapiens

<400> 2280  
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 Glu Cys Met Glu Ser Glu Gly Thr Gly Pro Thr His Ser Pro Ser Ser  
 35 40 45  
 Pro Ala Val Leu Phe Ser Phe Leu His Cys Ala Phe Val Ser Phe Leu  
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 <212> DNA  
 <213> Homo sapiens

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<211> 96

<212> PRT

<213> Homo sapiens

<400> 2282

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Pro	Ser	Glu	Asp	Ser	Arg	Gly	Thr	Phe	Val	Pro	Asp	Ile	Leu	His	Gly
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Ile	Asp	Ala	Lys	Lys	Pro	Phe	Ser	Leu	Lys	Ala	Asp	Gly	Glu	Asn	Pro
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	20		25		30										
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Gln	Ala	Phe	Gly	Arg	Ala	Val	Ile	Arg	Leu	Pro	Ala	Lys	Ala	Gln	Ala
			85					90						95	
Ser	His	Ala	Thr	Ser	Ser	Pro	Lys	Met	Arg	Lys	Val	Arg	Thr	Arg	Lys
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&lt;210&gt; 2285

&lt;211&gt; 6505

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2285

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<211> 1784

<212> PRT

<213> Homo sapiens

<400> 2286

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Ala	Arg	Pro	Gly	His	Ala	Gln	Pro	His	Val	Val	Tyr	Lys	Arg	Gln	Ala
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Pro	Glu	Arg	Leu	Ala	Gln	Arg	Gly	Asp	Ser	Ser	Ala	Pro	Ser	Thr	Cys

1677

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Glu	Tyr	Phe	Ala	Lys	Lys	Leu	Arg	Asp	Ala	Val	Val	Asp	Gly	Thr	Pro
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Pro	Gly Pro Val Phe Val Asp Asp Phe Tyr Tyr Asp Tyr Asn Phe Ile				
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Asn	Phe His Glu Asp Leu Ser Tyr Gly Pro Ser Glu Glu Pro Asp Leu				
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Asp	Leu Ala Gly Thr Gly Asp Arg Thr Pro Pro Pro His Ser His Pro				
1185		1190		1195	1200
Ala	Ala Pro Ser Thr Gly Ser Pro Val Pro Ala Thr Glu Pro Pro Ala				
	1205		1210		1215
Ala	Lys Glu Glu Gly Val Leu Gly Pro Trp Ser Pro Ser Pro Trp Pro				
	1220		1225		1230
Ser	Gln Ala Gly Arg Ser Pro Pro Pro Ser Glu Gln Thr Pro Gly				
	1235		1240		1245
Asn	Pro Leu Ile Asn Phe Leu Pro Glu Glu Asp Thr Pro Ile Gly Ala				
	1250		1255		1260
Pro	Asp Leu Gly Leu Pro Ser Leu Ser Trp Pro Arg Val Ser Thr Asp				
1265		1270		1275	1280
Gly	Leu Gln Thr Pro Ala Thr Pro Glu Ser Gln Asn Asp Phe Pro Val				
	1285		1290		1295
Gly	Lys Asp Ser Gln Ser Gln Leu Pro Pro Trp Arg Asp Arg Thr				
	1300		1305		1310
Asn	Glu Val Phe Lys Asp Asp Glu Glu Pro Lys Gly Arg Gly Ala Pro				
	1315		1320		1325
His	Leu Pro Pro Arg Pro Ser Ser Thr Leu Pro Pro Leu Ser Pro Val				
	1330		1335		1340
Gly	Ser Thr His Ser Ser Pro Ser Pro Asp Val Ala Glu Leu Trp Thr				
1345		1350		1355	1360
Gly	Gly Thr Val Ala Trp Glu Pro Ala Leu Glu Gly Gly Leu Gly Pro				
	1365		1370		1375
Val	Asp Ser Glu Leu Trp Pro Thr Val Gly Val Ala Ser Leu Leu Pro				
	1380		1385		1390
Pro	Pro Ile Ala Pro Leu Pro Glu Met Lys Val Arg Asp Ser Ser Leu				
	1395		1400		1405
Glu	Pro Gly Thr Pro Ser Phe Pro Ala Pro Gly Pro Gly Ser Trp Asp				
	1410		1415		1420
Leu	Gln Thr Val Ala Val Trp Gly Thr Phe Leu Pro Thr Thr Leu Thr				
1425		1430		1435	1440
Gly	Leu Gly His Met Pro Glu Pro Ala Leu Asn Pro Gly Pro Lys Gly				
	1445		1450		1455
Gln	Pro Glu Ser Leu Ser Pro Glu Val Pro Leu Ser Ser Arg Leu Leu				
	1460		1465		1470
Ser	Thr Pro Ala Trp Asp Ser Pro Ala Asn Ser His Arg Val Pro Glu				
	1475		1480		1485
Thr	Gln Pro Leu Ala Pro Ser Leu Ala Glu Ala Gly Pro Pro Ala Asp				

1490                      1495                      1500  
 Pro Leu Val Val Arg Asn Ala Ser Trp Gln Ala Gly Asn Trp Ser Glu  
 1505                      1510                      1515                      1520  
 Cys Ser Thr Thr Cys Gly Leu Gly Ala Val Trp Arg Pro Val Arg Cys  
                     1525                      1530                      1535  
 Ser Ser Gly Arg Asp Glu Asp Cys Ala Pro Ala Gly Arg Pro Gln Pro  
                     1540                      1545                      1550  
 Ala Arg Arg Cys His Leu Arg Pro Cys Ala Thr Trp His Ser Gly Asn  
                     1555                      1560                      1565  
 Trp Ser Lys Cys Ser Arg Ser Cys Gly Gly Gly Ser Ser Val Arg Asp  
                     1570                      1575                      1580  
 Val Gln Cys Val Asp Thr Arg Asp Leu Arg Pro Leu Arg Pro Phe His  
 1585                      1590                      1595                      1600  
 Cys Gln Pro Gly Pro Ala Lys Pro Pro Ala His Arg Pro Cys Gly Ala  
                     1605                      1610                      1615  
 Gln Pro Cys Leu Ser Trp Tyr Thr Ser Ser Trp Arg Glu Cys Ser Glu  
                     1620                      1625                      1630  
 Ala Cys Gly Gly Gly Glu Gln Gln Arg Leu Val Thr Cys Pro Glu Pro  
                     1635                      1640                      1645  
 Gly Leu Cys Glu Glu Ala Leu Arg Pro Asn Thr Thr Arg Pro Cys Asn  
                     1650                      1655                      1660  
 Thr His Pro Cys Thr Gln Trp Val Val Gly Pro Trp Gly Gln Cys Ser  
 1665                      1670                      1675                      1680  
 Ala Pro Cys Gly Gly Gly Val Gln Arg Arg Leu Val Lys Cys Val Asn  
                     1685                      1690                      1695  
 Thr Gln Thr Gly Leu Pro Glu Glu Asp Ser Asp Gln Cys Gly His Glu  
                     1700                      1705                      1710  
 Ala Trp Pro Glu Ser Ser Arg Pro Cys Gly Thr Glu Asp Cys Glu Pro  
                     1715                      1720                      1725  
 Val Glu Pro Pro Arg Cys Glu Arg Asp Arg Leu Ser Phe Gly Phe Cys  
                     1730                      1735                      1740  
 Glu Thr Leu Arg Leu Leu Gly Arg Cys Gln Leu Pro Thr Ile Arg Thr  
 1745                      1750                      1755                      1760  
 Gln Cys Cys Arg Ser Cys Ser Pro Pro Ser His Gly Ala Pro Ser Arg  
                     1765                      1770                      1775  
 Gly His Gln Arg Val Ala Arg Arg  
                     1780

&lt;210&gt; 2287

&lt;211&gt; 750

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2287

tgacacaggt tatttctctt tgggttaaata tcttacaagt cttttttaaa tcttcacttc  
 60  
 tggcctataa aagtatcatc atccccattt tacagaatgg gaaagtaagg cgtggggagg  
 120  
 ttgaggacat ttgtacagag tcaggtaact ggaggaactg gactacaacc ctgctcagtg  
 180  
 cagccagtgt gactgagcgc ctctgagag ccaggtggat tctgccctca aggatccatg  
 240  
 ctctggggcaa gaaaccacc catcagcagg tggcttctgc tgagccacaa caggcacaca  
 300

gaggggtcca tgggagccca gaggggagca tctgaccagg ctcaggggaa ggaatgtgtc  
 360  
 cagcagagtc acagaggagc agtatgagtt agccaggtag gggacattcc aggcagggga  
 420  
 gcagcaggac aaaagcatag aggtagcact gccagtgccca agttccaaaa taagaggctg  
 480  
 actgctacag ggtccatata ggaaaataat gggaaataca tttggacagg aggtgggggtc  
 540  
 tgtaacaaag gactttaatt ccagggttaag gaatctggat gttaaaacaa cattagctgc  
 600  
 catttctaca gtgctacttc ccaggctctg tgcctttctg ggagccttga aggtttgtga  
 660  
 gctggaagga gatattagga aaaaacgat gcatgaggat agctcaggta aaggttattg  
 720  
 ataagtaaga atgcctggca ccaaacgcgt  
 750

<210> 2288

<211> 142

<212> PRT

<213> Homo sapiens

<400> 2288

Met	Ala	Ala	Asn	Val	Val	Leu	Thr	Ser	Arg	Phe	Leu	Asn	Leu	Glu	Leu
1			5						10				15		
Lys	Ser	Phe	Val	Thr	Asp	Pro	Thr	Ser	Cys	Pro	Asn	Val	Phe	Pro	Ile
		20						25				30			
Ile	Phe	Leu	Tyr	Gly	Pro	Cys	Ser	Ser	Gln	Pro	Leu	Ile	Leu	Glu	Leu
		35					40					45			
Gly	Thr	Gly	Ser	Ala	Thr	Ser	Met	Leu	Leu	Ser	Cys	Cys	Ser	Pro	Ala
	50					55					60				
Trp	Asn	Val	Pro	Tyr	Leu	Ala	Asn	Ser	Tyr	Cys	Ser	Ser	Val	Thr	Leu
65					70					75				80	
Leu	Asp	Thr	Phe	Leu	Pro	Leu	Ser	Leu	Val	Arg	Cys	Ser	Pro	Leu	Gly
			85						90					95	
Ser	His	Gly	Pro	Leu	Cys	Val	Pro	Val	Val	Ala	Gln	Gln	Lys	Pro	Pro
			100					105					110		
Ala	Asp	Gly	Trp	Val	Ser	Cys	Pro	Glu	His	Gly	Ser	Leu	Arg	Ala	Glu
		115					120					125			
Ser	Thr	Trp	Leu	Ser	Gly	Gly	Ala	Gln	Ser	His	Trp	Leu	His		
		130				135						140			

<210> 2289

<211> 381

<212> DNA

<213> Homo sapiens

<400> 2289

caggacgcgg cctcggcggg gcccgggccg aacggctgcg gacacctggg cgccgaggag  
 60  
 ccgagcgccg ccgcctccgg catggatcat tgcgtgacgg tggagcgcg gctggagaag  
 120  
 gtgctgcaca agttctcggg ctacgggcag ctgtgcgagc gcggcctgga ggagctcatc  
 180

gactacaccg gcggtctcaa gcaccagatc ctgcagagcc acggccaaga tgctgaatta  
 240  
 tcagggacac tttcacttgt tttgacacag ggctgtaaaa gaataanaag gggatactgg  
 300  
 ttcaaaaatt ggctccgac cacaagaca tccacagcag tgtttctcgg gttggaaaag  
 360  
 ccattgatga ggattcactt t  
 381

<210> 2290

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2290

Met	Asp	His	Cys	Val	Thr	Val	Glu	Arg	Glu	Leu	Glu	Lys	Val	Leu	His
1				5					10					15	
Lys	Phe	Ser	Gly	Tyr	Gly	Gln	Leu	Cys	Glu	Arg	Gly	Leu	Glu	Glu	Leu
		20					25					30			
Ile	Asp	Tyr	Thr	Gly	Gly	Leu	Lys	His	Gln	Ile	Leu	Gln	Ser	His	Gly
	35					40					45				
Gln	Asp	Ala	Glu	Leu	Ser	Gly	Thr	Leu	Ser	Leu	Val	Leu	Thr	Gln	Gly
	50				55					60					
Cys	Lys	Arg	Ile	Xaa	Arg	Gly	Tyr	Trp	Phe	Lys	Asn	Trp	Pro	Pro	Thr
65			70						75					80	
Thr	Lys	Thr	Ser	Thr	Ala	Val	Phe	Leu	Gly	Leu	Glu	Lys	Pro	Leu	Met
			85					90					95		
Arg	Ile	His	Phe												
			100												

<210> 2291

<211> 573

<212> DNA

<213> Homo sapiens

<400> 2291

gcatgctcta ccgcaaagtc gggccccac cgattaataaa tgccccgggtc gaggacagcc  
 60  
 ttcggcagca ccgactcatt atcggcaccg acctagtcaa ttgccaccac ctgcttatgc  
 120  
 aagtggtcga tagaagcccc agccggctta agccagttct ggaaaaccac cacatatcgc  
 180  
 acatgttcgt tgtgacgatg cagctgagcc attgaatcga cggtcagcgc catgaacgcc  
 240  
 cgatgctcgt tgacggtaag actcgcgcgac ccagcaacgt cggcggttgt cgtgccctca  
 300  
 tcggtgtaat ggcgacgagc gacgatgacg tcatgtccgc cggcaaagaa ggctgcggaa  
 360  
 gcctcgcgta attcttgggg accgaggtcc tcggcgcgcc ggtctgaccc caccgccttg  
 420  
 aacttggcgt taaggaccga cctcacgtga gcctcccctg acgggttaga caggtattcc  
 480  
 tcttgccagt cccgcgctgc ccgaggcaag ctcatcccc agttgagctg ccaataccgc  
 540



cacgacagga tctcgaaaag attggggacg cgt  
573

<210> 2292  
<211> 140  
<212> PRT  
<213> Homo sapiens

<400> 2292  
Met Ser Leu Pro Arg Ala Ala Arg Asp Trp Gln Glu Glu Tyr Leu Ser  
1 5 10 15  
Asn Pro Ser Gly Glu Ala His Val Arg Ser Val Leu Asn Ala Lys Phe  
20 25 30  
Lys Ala Val Gly Ser Asp Arg Arg Ala Glu Asp Leu Gly Pro Gln Glu  
35 40 45  
Leu Arg Glu Ala Ser Ala Ala Phe Phe Ala Gly Gly His Asp Val Ile  
50 55 60  
Val Ala Arg Arg His Tyr Thr Asp Glu Gly Thr Thr Thr Ala Asp Val  
65 70 75 80  
Ala Gly Ser Ala Ser Leu Thr Val Asn Glu His Arg Ala Phe Met Ala  
85 90 95  
Leu Thr Val Asp Ser Met Ala Gln Leu His Arg His Asn Glu His Val  
100 105 110  
Arg Tyr Val Val Phe Gln Asn Trp Leu Lys Pro Ala Gly Ala Ser  
115 120 125  
Ile Asp His Leu His Lys Gln Val Val Ala Ile Asp  
130 135 140

<210> 2293  
<211> 358  
<212> DNA  
<213> Homo sapiens

<400> 2293  
acgcgtgaag gaatggaagc tgctctcgtc ggtgcacaca agactggcgg gtgcccattg  
60  
gtgaacactg tcgctaagaa ctggttgaac cggctcaaca cgccggatat gaaaccact  
120  
gaggagatca agcggcagtt ccaaggtctg cattggttg gacgtaagta tgggctcaac  
180  
cacggagagt tctatcttga cgacgagcag tgggccacgc tcatggccgg gtcctctttc  
240  
gaggcgaatc cgcgattaa gagcaacttt gattccgagg gcgctgttgt ggatccggat  
300  
tccgattcac ttgctggggc tgatcgagat gcccgagggtg cttcggatgc atgccttc  
358

<210> 2294  
<211> 115  
<212> PRT  
<213> Homo sapiens

<400> 2294  
Met Glu Ala Ala Leu Val Gly Ala His Lys Thr Gly Gly Cys Pro Leu

```

      1           5           10           15
Val Asn Thr Val Ala Lys Asn Trp Leu Asn Arg Leu Asn Thr Pro Asp
      20           25           30
Met Lys Pro Thr Glu Glu Ile Lys Arg Gln Phe Gln Gly Leu His Trp
      35           40           45
Leu Gly Arg Lys Tyr Gly Leu Asn His Gly Glu Phe Tyr Leu Asp Asp
      50           55           60
Glu Gln Trp Ala Thr Leu Met Ala Gly Ser Ser Phe Glu Ala Asn Pro
      65           70           75           80
Arg Ile Lys Ser Asn Phe Asp Ser Glu Gly Ala Val Val Asp Pro Asp
      85           90           95
Ser Asp Ser Leu Ala Gly Ala Asp Arg Asp Ala Arg Gly Ala Ser Asp
      100          105          110
Ala Cys Leu
      115

```

<210> 2295  
 <211> 546  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2295
ggcaccgatac cgagtggtagg tgccgggatt aggnccgatac tanaaacatt ctccgccctt
60
ggggcgtagt gctgctcggt cattaccgca ctggtagcgc aaaatacgcg cggcgtgcag
120
tcggtgtatc gtatcgaacc ggattttgtc ggtgcacaac tggactctgt gttcagcgat
180
gtccgcattg attccaccaa aatcggcatg ctggcagagg cggatatcgt ggaagcggc
240
gcggagcgcc tcaaacatta tcgcgttaaa aacgtggtac ttgatacggg gatgctggcg
300
aaaagtggcg atccgctgct atctcctgct gctgtcgaaa ctctgcgaaa acaccttctg
360
ccacacgtcg cgctgatcac gccaaatttg ccggaggcgg cggcgctgct ggatgcgcct
420
catgcccgtg cagagcacga gatgaaagag caggggcgcg cacttctggc gcttggctgc
480
gaggcagtgc tgatgaaagg cggccatctt gacgatcctg agagcccgga ctggctcttc
540
acgcgt
546

```

<210> 2296  
 <211> 182  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2296
Gly Thr Asp Pro Ser Gly Gly Ala Gly Ile Arg Xaa Asp Leu Xaa Thr
1           5           10           15
Phe Ser Ala Leu Gly Ala Tyr Gly Cys Ser Val Ile Thr Ala Leu Val
20           25           30
Ala Gln Asn Thr Arg Gly Val Gln Ser Val Tyr Arg Ile Glu Pro Asp

```

```

      35          40          45
Phe Val Gly Ala Gln Leu Asp Ser Val Phe Ser Asp Val Arg Ile Asp
  50          55          60
Ser Thr Lys Ile Gly Met Leu Ala Glu Ala Asp Ile Val Glu Ala Val
  65          70          75          80
Ala Glu Arg Leu Lys His Tyr Arg Val Lys Asn Val Val Leu Asp Thr
      85          90          95
Val Met Leu Ala Lys Ser Gly Asp Pro Leu Leu Ser Pro Ala Ala Val
      100          105          110
Glu Thr Leu Arg Lys His Leu Leu Pro His Val Ala Leu Ile Thr Pro
      115          120          125
Asn Leu Pro Glu Ala Ala Ala Leu Leu Asp Ala Pro His Ala Arg Thr
      130          135          140
Glu His Glu Met Lys Glu Gln Gly Arg Ala Leu Leu Ala Leu Gly Cys
      145          150          155          160
Glu Ala Val Leu Met Lys Gly Gly His Leu Asp Asp Pro Glu Ser Pro
      165          170          175
Asp Trp Leu Phe Thr Arg
      180

```

&lt;210&gt; 2297

&lt;211&gt; 414

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2297

```

gggaattccg ggcccttccc cccaagcccg ggtaattttt tgtattttta aaaaaaagg
  60
gaattttccc acgttggggg ggggggggttc ggactttttc ccccaaaaac cccccccccc
  120
caccctccca aaggccgaaa agcaggggcca aaaccccccg gacccccccc ggggggggca
  180
aaaggaaaaa cccctttttt tttttttttt ttttatacac atgagggtct ctgggtaata
  240
aatgttgaga ttaggggtta ggtgagatta aacagggttct ttttttcatg atttctcgga
  300
gtctttatga tgctccacac cagtacttct caaagctgac tgtgtataca aaacactggg
  360
gatctgaccc acatgtaaag tctgatttct ttggtctggg gcaggcctga aatn
  414

```

&lt;210&gt; 2298

&lt;211&gt; 67

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2298

```

Lys Lys Arg Glu Phe Ser His Val Gly Gly Gly Gly Phe Gly Leu Phe
  1          5          10          15
Pro Pro Lys Thr Pro Pro Pro His Pro Pro Lys Gly Arg Lys Ala Gly
      20          25          30
Pro Lys Pro Pro Gly Pro Pro Pro Gly Gly Ala Lys Gly Lys Thr Pro
      35          40          45
Phe Phe Phe Phe Phe Tyr Thr His Glu Gly Leu Trp Leu Ile Asn

```

```

50
Val Glu Met
65
<210> 2299
<211> 987
<212> DNA
<213> Homo sapiens

<400> 2299
ngagatgtct aagttat tttttcccg gaaggcaaat ggctggcgtg gaagcacaac
60
ccgctttcac tcttcgaatt tgtgcttagc tcttttcttg tacctgcga ctcgtgacca
120
acatgctgtg atgtgtgccg agggaggaat tggtcagcta cacaacctgg atcttaccac
180
agtttggata tgactgaggc tctccaatgg gccagatadc actggcgacg gctgatcaga
240
ggtgcaacca gggatgatga ttcagggcca tacaactatt cctcgttgct cgcctgtggg
300
cgcaagtcct ctcagatccc taaactgtca ggaaggcacc ggattgttgt tccccacatc
360
cagcccttca aggatgagta tgagaagttc tccggagcct atgtgaacaa tcgaatacga
420
acaacaaagt acacacttct gaattttgtg ccaagaaatt tatttgaaca atttcacaga
480
gtgtgccaatt tatatttcct gttcctagtt gtcctgaact gggtaccttt ggtagaagcc
540
ttccaaaagg aaatcaccat gttgcctctg gtgggtgtcc ttacaattat cgcaattaaa
600
gatggcctgg aagattatcg gaaatacaaa attgacaac agatcaataa ttaataaact
660
aaagtttata gtaggaaaga gaaaaatac attgaccgat gctggaaaga cgttactgtt
720
ggggacttta ttcgcctctc ctgcaacgag gtcctccctg cagacatggt actactcttt
780
tccactgac cagatggaat ctgtcacatt gagacttctg gtcttgatgg agagagcaat
840
ttaaaccaga ggcaggtggt tcggggatat gcagaacagg actctgaagt tgatcctgat
900
aagttttcca gtaggataga atgtgaaagc ccaaacaatg acctcagcag attccgaggg
960
ttcctagaac attccaacaa agaacgc
987

<210> 2300
<211> 266
<212> PRT
<213> Homo sapiens

<400> 2300
Met Thr Glu Ala Leu Gln Trp Ala Arg Tyr His Trp Arg Arg Leu Ile
1 5 10 15
Arg Gly Ala Thr Arg Asp Asp Asp Ser Gly Pro Tyr Asn Tyr Ser Ser

```

```

      20      25      30
Leu Leu Ala Cys Gly Arg Lys Ser Ser Gln Ile Pro Lys Leu Ser Gly
      35      40      45
Arg His Arg Ile Val Val Pro His Ile Gln Pro Phe Lys Asp Glu Tyr
      50      55      60
Glu Lys Phe Ser Gly Ala Tyr Val Asn Asn Arg Ile Arg Thr Thr Lys
      65      70      75      80
Tyr Thr Leu Leu Asn Phe Val Pro Arg Asn Leu Phe Glu Gln Phe His
      85      90      95
Arg Ala Ala Asn Leu Tyr Phe Leu Phe Leu Val Val Leu Asn Trp Val
      100      105      110
Pro Leu Val Glu Ala Phe Gln Lys Glu Ile Thr Met Leu Pro Leu Val
      115      120      125
Val Val Leu Thr Ile Ile Ala Ile Lys Asp Gly Leu Glu Asp Tyr Arg
      130      135      140
Lys Tyr Lys Ile Asp Lys Gln Ile Asn Asn Leu Ile Thr Lys Val Tyr
      145      150      155      160
Ser Arg Lys Glu Lys Lys Tyr Ile Asp Arg Cys Trp Lys Asp Val Thr
      165      170      175
Val Gly Asp Phe Ile Arg Leu Ser Cys Asn Glu Val Ile Pro Ala Asp
      180      185      190
Met Val Leu Leu Phe Ser Thr Asp Pro Asp Gly Ile Cys His Ile Glu
      195      200      205
Thr Ser Gly Leu Asp Gly Glu Ser Asn Leu Lys Gln Arg Gln Val Val
      210      215      220
Arg Gly Tyr Ala Glu Gln Asp Ser Glu Val Asp Pro Glu Lys Phe Ser
      225      230      235      240
Ser Arg Ile Glu Cys Glu Ser Pro Asn Asn Asp Leu Ser Arg Phe Arg
      245      250      255
Gly Phe Leu Glu His Ser Asn Lys Glu Arg
      260      265

```

&lt;210&gt; 2301

&lt;211&gt; 390

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2301

```

tatcccaagc gcttcaaatt tgatgccgat gagttctact tgaaatcgtc cgaggaaatg
60
nncgccacct cttccgcgna tttccctgaa gcctgcgata acactatgga aatcgctgag
120
nncgttgcca cggtgaattc aacacaaacg caanactaca tgcccgatgtt cccaccccg
180
gagggggaga atgaggaatc ctggttcgtc aaagaagttg aacgcggttt gcactaccga
240
ttccccgagg gcattcccga tgacgtacgc aagcaggcag attatgaagt agggattatt
300
acccagatgg gattccccgg ctacttcttg gtggtcgcgg attttatcaa ctgggcgaag
360
aataacggaa ttcgagtggg ccccgggcgt
390

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&lt;210&gt; 2302

<211> 130  
 <212> PRT  
 <213> Homo sapiens

<400> 2302  
 Tyr Pro Lys Arg Phe Lys Phe Asp Ala Asp Glu Phe Tyr Leu Lys Ser  
 1 5 10 15  
 Ser Glu Glu Met Xaa Ala Thr Ser Ser Ala Xaa Phe Pro Glu Ala Cys  
 20 25 30  
 Asp Asn Thr Met Glu Ile Ala Glu Xaa Val Ala Thr Leu Asn Ser Thr  
 35 40 45  
 Gln Thr Gln Xaa Tyr Met Pro Asp Phe Pro Thr Pro Glu Gly Glu Asn  
 50 55 60  
 Glu Glu Ser Trp Phe Val Lys Glu Val Glu Arg Gly Leu His Tyr Arg  
 65 70 75 80  
 Phe Pro Glu Gly Ile Pro Asp Asp Val Arg Lys Gln Ala Asp Tyr Glu  
 85 90 95  
 Val Gly Ile Ile Thr Gln Met Gly Phe Pro Gly Tyr Phe Leu Val Val  
 100 105 110  
 Ala Asp Phe Ile Asn Trp Ala Lys Asn Asn Gly Ile Arg Val Gly Pro  
 115 120 125  
 Gly Arg  
 130

<210> 2303  
 <211> 638  
 <212> DNA  
 <213> Homo sapiens

<400> 2303  
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 60  
 gcacctgtgt ttggctacct gggcgaccga catagccgca aggcctaccat gagcttcggt  
 120  
 atcttgctgt ggtcaggagc tggcctctct agctccttca tctccccccg gtattcttgg  
 180  
 ctcttcttcc tgtcccgagg catcgagggc actggtctcg ccagctactc caccatcgcg  
 240  
 cccaccgtcc tgggcgacct cttcgtgagg gaccagcgca cccgcgtgct ggtgtcttc  
 300  
 tacatcttta tccccgttgg aagtggctctg ggctacgtgc tggggtcggc tgtgacgatg  
 360  
 ctgactggga actggcgctg ggcctccga gtcatgcctt gcctggaggc cgtggccttg  
 420  
 atcctgctta tctgctggt tccagaccca ccccgaggag ctgccgagac acagggggag  
 480  
 ggggccgtgg gaggttcag aagcagctgg tgtgaggacg tcagatacct ggggaaaaac  
 540  
 tggagttttg tgtggtcgac cctcgagtg accgccatgg cctttgtgac tggagccctg  
 600  
 gggttctggg cccccaagtt tctgctcgag gcacgcgt  
 638

<210> 2304

<211> 212  
 <212> PRT  
 <213> Homo sapiens

<400> 2304  
 Xaa Asp Pro Gly Cys Pro Cys Val Ser Pro Ser Val Phe Val Ser Cys  
 1 5 10 15  
 Leu Leu Leu Ser Ala Pro Val Phe Gly Tyr Leu Gly Asp Arg His Ser  
 20 25 30  
 Arg Lys Ala Thr Met Ser Phe Gly Ile Leu Leu Trp Ser Gly Ala Gly  
 35 40 45  
 Leu Ser Ser Ser Phe Ile Ser Pro Arg Tyr Ser Trp Leu Phe Phe Leu  
 50 55 60  
 Ser Arg Gly Ile Glu Gly Thr Gly Ser Ala Ser Tyr Ser Thr Ile Ala  
 65 70 75 80  
 Pro Thr Val Leu Gly Asp Leu Phe Val Arg Asp Gln Arg Thr Arg Val  
 85 90 95  
 Leu Ala Val Phe Tyr Ile Phe Ile Pro Val Gly Ser Gly Leu Gly Tyr  
 100 105 110  
 Val Leu Gly Ser Ala Val Thr Met Leu Thr Gly Asn Trp Arg Trp Ala  
 115 120 125  
 Leu Arg Val Met Pro Cys Leu Glu Ala Val Ala Leu Ile Leu Leu Ile  
 130 135 140  
 Leu Leu Val Pro Asp Pro Pro Arg Gly Ala Ala Glu Thr Gln Gly Glu  
 145 150 155 160  
 Gly Ala Val Gly Gly Phe Arg Ser Ser Trp Cys Glu Asp Val Arg Tyr  
 165 170 175  
 Leu Gly Lys Asn Trp Ser Phe Val Trp Ser Thr Leu Gly Val Thr Ala  
 180 185 190  
 Met Ala Phe Val Thr Gly Ala Leu Gly Phe Trp Ala Pro Lys Phe Leu  
 195 200 205  
 Leu Glu Ala Arg  
 210

<210> 2305  
 <211> 340  
 <212> DNA  
 <213> Homo sapiens

<400> 2305  
 gccccgcct ctatcttccg gcatcgtcac agtcgcatcg tgacgggtact ggctggagtc  
 60  
 tcggaccagc acactttgac cgtcgtgggc gcctcgtgac atggggtaac gcgaacctcg  
 120  
 tcgctcctgt tcttgacctc ttccgtgccc ccattgacaa cgatcgggca agttcactgg  
 180  
 cccgcaacgc tattggtgac gcagcactcg cagctggtct cgaccgactc gtccacacca  
 240  
 cggcgctcggg gcgcgacgag ggcgatgagt tggtcgtcgt tactcgcagc gctgctgccg  
 300  
 ccgcacgcaa ttccatgacg acaacgtgga gttggcgcgc  
 340

<210> 2306

<211> 101  
<212> PRT  
<213> Homo sapiens

<400> 2306  
Met Glu Leu Arg Ala Ala Ala Ala Leu Arg Val Thr Thr Thr Asn  
1 5 10 15  
Ser Ser Pro Ser Ser Arg Thr Asp Ala Val Val Trp Thr Ser Arg Ser  
20 25 30  
Arg Pro Ala Ala Ser Ala Ala Ser Pro Ile Ala Leu Arg Ala Ser Glu  
35 40 45  
Leu Ala Arg Ser Leu Ser Met Gly Ala Arg Lys Arg Ser Arg Thr Gly  
50 55 60  
Ala Thr Arg Phe Ala Leu Pro His Val Thr Arg Arg Pro Arg Arg Ser  
65 70 75 80  
Lys Cys Ala Gly Pro Arg Leu Gln Pro Val Pro Ser Arg Cys Asp Cys  
85 90 95  
Asp Asp Ala Gly Arg  
100

<210> 2307  
<211> 360  
<212> DNA  
<213> Homo sapiens

<400> 2307  
ngcttctcag ctgaaggggg agataaagct ctacataaga tgggtccagg tgggggcaaa  
60  
gccaaggcac tgggtggggc tggcagtggg agcaagggct cagcaggtgg cggaagcaag  
120  
cgacggctga gcagcgaaga cagctccctg gagccagacc tggccgagat gagcctggat  
180  
gacagcagcc tggccctggg cgcagaggcc aggaccttcg ggggattccc tgagagccct  
240  
ccaccctgtc ctctccacgg tggctcccga ggcccttcca ctttcttcc tgagccccc  
300  
gatacttatg aagaagatgg tgatgagagt ggcaatgggc ttcccaaac caaagaggca  
360

<210> 2308  
<211> 120  
<212> PRT  
<213> Homo sapiens

<400> 2308  
Xaa Phe Ser Ala Glu Gly Gly Asp Lys Ala Leu His Lys Met Gly Pro  
1 5 10 15  
Gly Gly Gly Lys Ala Lys Ala Leu Gly Gly Ala Gly Ser Gly Ser Lys  
20 25 30  
Gly Ser Ala Gly Gly Gly Ser Lys Arg Arg Leu Ser Ser Glu Asp Ser  
35 40 45  
Ser Leu Glu Pro Asp Leu Ala Glu Met Ser Leu Asp Asp Ser Ser Leu  
50 55 60  
Ala Leu Gly Ala Glu Ala Arg Thr Phe Gly Gly Phe Pro Glu Ser Pro



```

65          70          75          80
Pro Pro Cys Pro Leu His Gly Gly Ser Arg Gly Pro Ser Thr Phe Leu
          85          90          95
Pro Glu Pro Pro Asp Thr Tyr Glu Glu Asp Gly Asp Glu Ser Gly Asn
          100          105          110
Gly Leu Pro Lys Thr Lys Glu Ala
          115          120

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<210> 2309  
 <211> 395  
 <212> DNA  
 <213> Homo sapiens

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<400> 2309
ggatccctac aaatggggcc ctgctctgag cacattccca tgagggtgc ctgccctgtg
60
cactctctgc cctgggccgc ggggcctgac tgggttccca cctcctccta cccactgggg
120
tcttttccag caggcacagg gattcctcat gggggaggca gagcccaccc gtctgtcctc
180
ggtgacggcc tgagctgtgc acggcctccc ctgccctcct gttctcaggc cccccagggt
240
ccatccagcc ccagcgtgtg gcgttctggc tcttccctgg agtctcctcc cagaccacgc
300
gactccactc acactgtgcc tagcggactg tgtggttgat gcagccggct cacttgagtg
360
tgttgtgtta tgcccacaac aggcttgccg tcacc
395

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<210> 2310  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

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<400> 2310
Met Gly Pro Cys Ser Glu His Ile Pro Met Arg Ala Ala Cys Pro Val
1          5          10          15
His Ser Leu Pro Trp Ala Ala Gly Pro Asp.Trp Val Pro Thr Ser Ser
20          25          30
Tyr Pro Leu Gly Ser Phe Pro Ala Gly Thr Gly Ile Pro His Gly Gly
35          40          45
Gly Arg Ala His Pro Ser Val Leu Gly Asp Gly Leu Ser Cys Ala Arg
50          55          60
Pro Pro Leu Pro Ser Cys Ser Gln Ala Pro Gln Gly Pro Ser Ser Pro
65          70          75          80
Ser Val Trp Arg Ser Gly Ser Ser Leu Glu Ser Pro Pro Arg Pro Arg
85          90          95
Asp Ser Thr His Thr Val Pro Ser Gly Leu Cys Gly
100          105

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<210> 2311  
 <211> 378  
 <212> DNA  
 <213> Homo sapiens

<400> 2311  
 gtgcacgccg agatgctgcc gcaagacaag cagcgtgtcg tcggcgagtt gaagcgccag  
 60  
 ggcttctcag tgatcaaggc cggcgatggc atcaatgatt gcgacgctct cgccgcggcg  
 120  
 gatgtcggca gtcccatggg cggcagcgcg gacgtggctc tcgaaacggc cgatgctgcc  
 180  
 gtccttcacg gacgggtggg ggacgtcttc gcgatgatcg cccatcga gcaaacatg  
 240  
 gccaacattc gacagaacat cgcgatcgcg atcgggctaa aggcgggtgt ccttgtaacg  
 300  
 accgtcgtcg gcatcacggg gctttggcct gcaatcctcg ccgatacggg gaccacggag  
 360  
 cttgtgacca tgaacgcg  
 378

<210> 2312  
 <211> 126  
 <212> PRT  
 <213> Homo sapiens

<400> 2312  
 Val His Ala Glu Met Leu Pro Gln Asp Lys Gln Arg Val Val Gly Glu  
 1 5 10 15  
 Leu Lys Arg Gln Gly Phe Ser Val Ile Lys Val Gly Asp Gly Ile Asn  
 20 25 30  
 Asp Cys Asp Ala Leu Ala Ala Asp Val Gly Ser Pro Met Gly Gly  
 35 40 45  
 Ser Ala Asp Val Ala Leu Glu Thr Ala Asp Ala Ala Val Leu His Gly  
 50 55 60  
 Arg Val Gly Asp Val Phe Ala Met Ile Ala Leu Ser Lys Arg Thr Met  
 65 70 75 80  
 Ala Asn Ile Arg Gln Asn Ile Ala Ile Ala Gly Leu Lys Ala Val  
 85 90 95  
 Phe Leu Val Thr Thr Val Val Gly Ile Thr Gly Leu Trp Pro Ala Ile  
 100 105 110  
 Leu Ala Asp Thr Gly Thr Thr Glu Leu Val Thr Met Asn Ala  
 115 120 125

<210> 2313  
 <211> 669  
 <212> DNA  
 <213> Homo sapiens

<400> 2313  
 ctagtggcat ggtctcgtg gtcttttagtg gagcataccg acacatcggg gactcaaacg  
 60  
 atccgaatca tggtctgtcc tgggtggcct ggaaccatta acgtacgcct caccatcgc  
 120  
 ttaagcgacg ccggtctagc tgctgaagtc accgcgcgca atgtcggtag gacagcgggg  
 180  
 ccgcttgat acgcagcaca cccctatctc tgtctgggtg gcaccatcga cgactggaca  
 240

gtcgacgccc cgtttacctc gtgggttacag gtcgatgac ggctgctacc aatgcagatg  
 300  
 cgcgagatgg acagcatcca cgcgctgaac ggtctcacgg gcggacagcg caccttcgat  
 360  
 accgcttaca ccgtgaaagg aggacggaac cgtcggatcg cccgcatggc gtatccgggt  
 420  
 ctcaacgggtg aaacgagcca cgaattgtgg ggcgacgccg cgatgagctg ggtgcaagtc  
 480  
 tacactccag acgaccgcca cagtctggcc atcgagccaa tgacctgcgg cccagatgca  
 540  
 tttaatgagg gcccgaccca cggtagcgtc attcgactgg agcccggtaa tgacgtcaca  
 600  
 ctgcactggg gcacgccta acccgcgga gctcgaaagg acaaggacgg gaaggcagga  
 660  
 ttcacgcgt  
 669

&lt;210&gt; 2314

&lt;211&gt; 206

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2314

Leu	Val	Ala	Trp	Ser	Arg	Trp	Ser	Leu	Val	Glu	His	Thr	Asp	Thr	Ser
1			5					10					15		
Val	Thr	Gln	Thr	Ile	Arg	Ile	Met	Ala	Arg	Pro	Gly	Trp	Pro	Gly	Thr
		20					25						30		
Ile	Asn	Val	Arg	Leu	Thr	His	Arg	Leu	Ser	Asp	Ala	Gly	Leu	Ala	Val
		35					40					45			
Glu	Val	Thr	Ala	Arg	Asn	Val	Gly	Thr	Thr	Ala	Gly	Pro	Leu	Gly	Tyr
	50				55					60					
Ala	Ala	His	Pro	Tyr	Leu	Cys	Leu	Gly	Gly	Thr	Ile	Asp	Asp	Trp	Thr
65					70					75				80	
Val	Asp	Ala	Pro	Phe	Thr	Ser	Trp	Leu	Gln	Val	Asp	Asp	Arg	Leu	Leu
				85				90						95	
Pro	Met	Gln	Met	Arg	Glu	Met	Asp	Ser	Ile	His	Ala	Leu	Asn	Gly	Leu
		100					105						110		
Thr	Gly	Gly	Gln	Arg	Thr	Phe	Asp	Thr	Ala	Tyr	Thr	Val	Lys	Gly	Gly
	115					120						125			
Arg	Asn	Arg	Arg	Ile	Ala	Arg	Met	Ala	Tyr	Pro	Gly	Leu	Asn	Gly	Glu
	130					135					140				
Thr	Ser	His	Glu	Leu	Trp	Gly	Asp	Ala	Ala	Met	Ser	Trp	Val	Gln	Val
145				150						155				160	
Tyr	Thr	Pro	Asp	Asp	Arg	His	Ser	Leu	Ala	Ile	Glu	Pro	Met	Thr	Cys
			165						170					175	
Gly	Pro	Asp	Ala	Phe	Asn	Glu	Gly	Pro	Thr	His	Gly	Asp	Val	Ile	Arg
		180					185						190		
Leu	Glu	Pro	Gly	Asn	Asp	Val	Thr	Leu	His	Trp	Gly	Ile	Ala		
	195					200						205			

&lt;210&gt; 2315

&lt;211&gt; 546

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

<400> 2315  
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 60  
 acccaaggcc gaccaattcg catcgataag gcggtcgctt atcacacttc tcgcggcgctg  
 120  
 ccggtacatg aactgtttga ccgagtgcgc cgcagcttag accgagtgcg tgaacagggg  
 180  
 cacaacgtct actacgacga acagcgtgca tggcttgacg attactgggc aacggctgat  
 240  
 gttgaggtcg aggggtgcccc gaccggtatt cagcaggctg tcaggtggaa ccttttccag  
 300  
 attgctcagg catcagcccc tgcagatcaa cttggcattc cggcaaaggg tgtaaccggg  
 360  
 tcaggctatg aaggccacta cttttgggac actgaggttt atgtcatccc gatgttgacc  
 420  
 tacactcatc caagaatcgc tgagaatgcg ctgagattcc ggggaatac ccttccgcaa  
 480  
 gctcgacgcc gggctaagga attgtctgaa cgaggcgccc ttttcccgctg gcgaacaatc  
 540  
 accggt  
 546

<210> 2316  
 <211> 182  
 <212> PRT  
 <213> Homo sapiens

<400> 2316  
 Xaa Ala Ser Leu Ile Asp Thr Glu Pro Gly Met Gly Lys Arg Val Tyr  
 1 5 10 15  
 Arg Val Glu Ala Thr Gln Gly Arg Pro Ile Arg Ile Asp Lys Ala Val  
 20 25 30  
 Ala Tyr His Thr Ser Arg Gly Val Pro Val His Glu Leu Phe Asp Arg  
 35 40 45  
 Val Arg Arg Ser Leu Asp Arg Val Arg Glu Gln Gly His Asn Val Tyr  
 50 55 60  
 Tyr Asp Glu Gln Arg Ala Trp Leu Asp Asp Tyr Trp Ala Thr Ala Asp  
 65 70 75 80  
 Val Glu Val Glu Gly Ala Pro Thr Gly Ile Gln Gln Ala Val Arg Trp  
 85 90 95  
 Asn Leu Phe Gln Ile Ala Gln Ala Ser Ala Arg Ala Asp Gln Leu Gly  
 100 105 110  
 Ile Pro Ala Lys Gly Val Thr Gly Ser Gly Tyr Glu Gly His Tyr Phe  
 115 120 125  
 Trp Asp Thr Glu Val Tyr Val Ile Pro Met Leu Thr Tyr Thr His Pro  
 130 135 140  
 Arg Ile Ala Glu Asn Ala Leu Arg Phe Arg Val Asn Thr Leu Pro Gln  
 145 150 155 160  
 Ala Arg Arg Arg Ala Lys Glu Leu Ser Glu Arg Gly Ala Leu Phe Pro  
 165 170 175  
 Trp Arg Thr Ile Thr Gly  
 180

<210> 2317  
 <211> 496  
 <212> DNA  
 <213> Homo sapiens

<400> 2317  
 gccggcgggc tcgggaacgg tcaactgacct gcagcaggca atggcggctc cggtttaatc  
 60  
 agggttctgc acggagtttt ggatagtcgg tccagtcgcc actggcaagg cgcgaccagg  
 120  
 cagctgctga cgctgctgtg atgccgagga gatcggagac gattcgtggg tgcattctgcc  
 180  
 gggtcagttc gatcagcggc gtcgttcgag cgcttctga acgcagcccc tgctggcgca  
 240  
 gacgtcggct gagtgggcct ggtgtgagat gcaaccccg attcctgcca ggaaagagcc  
 300  
 atccctcggg tcggtgtctc gatgtgtcag cgagctcggc gatcgattc ccgaggacct  
 360  
 cgggcagttc gattggctcg gctccgatgg tgagcttccc cggtcgtgat gtcacgtcga  
 420  
 cctgtcacg ggtgagcggc acgatgcgag tgaggtggag gccgtagagg agcacgagca  
 480  
 acccagcggc acgcgt  
 496

<210> 2318  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

<400> 2318  
 Met Pro Arg Arg Ser Glu Thr Ile Arg Gly Cys Ile Cys Arg Val Ser  
 1 5 10 15  
 Ser Ile Ser Ala Val Val Arg Ala Leu Pro Glu Arg Ser Pro Cys Trp  
 20 25 30  
 Arg Arg Arg Arg Leu Ser Gly Pro Gly Val Arg Cys Asn Pro Gly Phe  
 35 40 45  
 Leu Pro Gly Lys Ser His Pro Ser Gly Arg Cys Leu Asp Val Ser Ala  
 50 55 60  
 Ser Ser Ala Ile Ala Phe Pro Arg Thr Ser Gly Ser Ser Ile Gly Ser  
 65 70 75 80  
 Ala Pro Met Val Ser Phe Pro Gly Arg Asp Val Thr Ser Thr Cys Ser  
 85 90 95  
 Arg Val Ser Ala Thr Met Arg Val Arg Trp Arg Pro  
 100 105

<210> 2319  
 <211> 1748  
 <212> DNA  
 <213> Homo sapiens

<400> 2319  
 ntgatcaagt ctcggctctt ggattatacc tttgttctc gaacttggat ctttctctgt  
 60

gaatatactc aattccaaaa ttatgtgaaa gaattgaaga aaaaacggaa gcagaaaact  
120  
ttttagtgga aaccagctaa tgggtgcaatg ggtcatggga tttctttgat aagaaatggt  
180  
gacaaacttc catctcagga tcatttgatt gttcaagaat acattgaaaa gcctttccta  
240  
atggaagggtt acaagtttga cttacgaatt tatattctgg ttacatcgtg tgatccacta  
300  
aaaatatttc tctaccatga tgggcttggt cgaatgggta cagagaagta cattccacct  
360  
aatgagtcca atttgaccca gttatacatg catctgacaa actactccgt gaacaagcat  
420  
aatgagcatt ttgaacggga tgaactgag aacaaaggca gcaaacgttc catcaaatgg  
480  
tttacagaat tccttcaagc aaatcaacat gatgttgcta agttttggag tgatatttca  
540  
gaattgggtg taaagacctt gattgtagca gaacctcatg tctctcatgc ctatcgaatg  
600  
tgtagacctg gtcaacctcc aggaagcgaa agtgtctgct ttgaagtcct gggatttgat  
660  
attttgttgg atagaaaact aaagccatgg cttctggaga ttaaccgagc cccaagcttt  
720  
ggaactgatc agaaaataga ctatgatgta aaaaggggag tgctgctaaa tgcgttgaag  
780  
ctactaaaca taaggaccag tgacaaaaga agaaacttgg ccaaacaaaa agctgaggct  
840  
caaaggaggc tctatgggtc aaattcaatt aaaaggctct taccaggctc ctccagactgg  
900  
gaacagcaga gacaccagtt ggagaggcgg aaagaagagt tgaaagagag actcgctcaa  
960  
gtacgaaagc agatctcacg agaagaacat gaaaatcgac atatggggaa ttatagacga  
1020  
atttatctct ctgaagataa agcattactt gaaaagtatg aaaatttggt agctgttgcc  
1080  
tttcagacct tcctttcagg aagagcagct tcattccagc gagagttgaa taatcctttg  
1140  
aaaaggatga aggaagaaga tattttggat cttctggagc aatgtgaaat tgatgatgaa  
1200  
aagttgatgg gaaaaactac caagactcga ggaccaaacg ctctgtgttc tatgcctgag  
1260  
agtactgaga taatgaaaag accaaagtac tgcagcagtg acagcagtta tgatagtagc  
1320  
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1380  
aagcaagtta catataatct taaacctctc aaccactaca aattaattca acaaccagc  
1440  
tccataagac gttcagtcag ctgccctcgg tccatctctg ctcaatcacc ttccagtggg  
1500  
gacacccgcc cattttctgc tcaacaaatg atatctgtgt caggccaac ttctgcatct  
1560  
cggtcacatt ccttaaaccc gggccttcct cctacatgag gcattctgct cacagtaatg  
1620  
atgcctgctc taccaactct caagtgagtg agtctttgag gcaactgaaa acaaaagaac  
1680

aagaagatga tctaacaagt cagaccttat ttgttctcaa agacatgaag atccgggttc

1740

caggaaag

1748

<210> 2320

<211> 532

<212> PRT

<213> Homo sapiens

<400> 2320

Xaa	Ile	Lys	Ser	Arg	Ser	Leu	Asp	Tyr	Thr	Phe	Val	Pro	Arg	Thr	Trp
1			5						10					15	
Ile	Phe	Pro	Ala	Glu	Tyr	Thr	Gln	Phe	Gln	Asn	Tyr	Val	Lys	Glu	Leu
		20					25						30		
Lys	Lys	Lys	Arg	Lys	Gln	Lys	Thr	Phe	Ile	Val	Lys	Pro	Ala	Asn	Gly
		35					40					45			
Ala	Met	Gly	His	Gly	Ile	Ser	Leu	Ile	Arg	Asn	Gly	Asp	Lys	Leu	Pro
	50					55					60				
Ser	Gln	Asp	His	Leu	Ile	Val	Gln	Glu	Tyr	Ile	Glu	Lys	Pro	Phe	Leu
65				70						75				80	
Met	Glu	Gly	Tyr	Lys	Phe	Asp	Leu	Arg	Ile	Tyr	Ile	Leu	Val	Thr	Ser
			85						90					95	
Cys	Asp	Pro	Leu	Lys	Ile	Phe	Leu	Tyr	His	Asp	Gly	Leu	Val	Arg	Met
		100						105					110		
Gly	Thr	Glu	Lys	Tyr	Ile	Pro	Pro	Asn	Glu	Ser	Asn	Leu	Thr	Gln	Leu
	115					120						125			
Tyr	Met	His	Leu	Thr	Asn	Tyr	Ser	Val	Asn	Lys	His	Asn	Glu	His	Phe
	130				135						140				
Glu	Arg	Asp	Glu	Thr	Glu	Asn	Lys	Gly	Ser	Lys	Arg	Ser	Ile	Lys	Trp
145				150						155				160	
Phe	Thr	Glu	Phe	Leu	Gln	Ala	Asn	Gln	His	Asp	Val	Ala	Lys	Phe	Trp
			165					170						175	
Ser	Asp	Ile	Ser	Glu	Leu	Val	Val	Lys	Thr	Leu	Ile	Val	Ala	Glu	Pro
		180						185					190		
His	Val	Leu	His	Ala	Tyr	Arg	Met	Cys	Arg	Pro	Gly	Gln	Pro	Pro	Gly
	195					200					205				
Ser	Glu	Ser	Val	Cys	Phe	Glu	Val	Leu	Gly	Phe	Asp	Ile	Leu	Leu	Asp
	210				215						220				
Arg	Lys	Leu	Lys	Pro	Trp	Leu	Leu	Glu	Ile	Asn	Arg	Ala	Pro	Ser	Phe
225				230						235				240	
Gly	Thr	Asp	Gln	Lys	Ile	Asp	Tyr	Asp	Val	Lys	Arg	Gly	Val	Leu	Leu
			245					250						255	
Asn	Ala	Leu	Lys	Leu	Leu	Asn	Ile	Arg	Thr	Ser	Asp	Lys	Arg	Arg	Asn
	260					265							270		
Leu	Ala	Lys	Gln	Lys	Ala	Glu	Ala	Gln	Arg	Arg	Leu	Tyr	Gly	Gln	Asn
	275					280						285			
Ser	Ile	Lys	Arg	Leu	Leu	Pro	Gly	Ser	Ser	Asp	Trp	Glu	Gln	Gln	Arg
	290				295						300				
His	Gln	Leu	Glu	Arg	Arg	Lys	Glu	Glu	Leu	Lys	Glu	Arg	Leu	Ala	Gln
305				310						315				320	
Val	Arg	Lys	Gln	Ile	Ser	Arg	Glu	Glu	His	Glu	Asn	Arg	His	Met	Gly
			325					330						335	
Asn	Tyr	Arg	Arg	Ile	Tyr	Pro	Pro	Glu	Asp	Lys	Ala	Leu	Leu	Glu	Lys

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          340          345          350
Tyr Glu Asn Leu Leu Ala Val Ala Phe Gln Thr Phe Leu Ser Gly Arg
          355          360          365
Ala Ala Ser Phe Gln Arg Glu Leu Asn Asn Pro Leu Lys Arg Met Lys
          370          375          380
Glu Glu Asp Ile Leu Asp Leu Leu Glu Gln Cys Glu Ile Asp Asp Glu
          385          390          395          400
Lys Leu Met Gly Lys Thr Thr Lys Thr Arg Gly Pro Lys Pro Leu Cys
          405          410          415
Ser Met Pro Glu Ser Thr Glu Ile Met Lys Arg Pro Lys Tyr Cys Ser
          420          425          430
Ser Asp Ser Ser Tyr Asp Ser Ser Ser Ser Ser Glu Ser Asp Glu
          435          440          445
Asn Glu Lys Glu Glu Tyr Gln Asn Lys Lys Arg Glu Lys Gln Val Thr
          450          455          460
Tyr Asn Leu Lys Pro Ser Asn His Tyr Lys Leu Ile Gln Gln Pro Ser
          465          470          475          480
Ser Ile Arg Arg Ser Val Ser Cys Pro Arg Ser Ile Ser Ala Gln Ser
          485          490          495
Pro Ser Ser Gly Asp Thr Arg Pro Phe Ser Ala Gln Gln Met Ile Ser
          500          505          510
Val Ser Arg Pro Thr Ser Ala Ser Arg Ser His Ser Leu Asn Pro Gly
          515          520          525
Leu Pro Pro Thr
          530

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<210> 2321  
 <211> 433  
 <212> DNA  
 <213> Homo sapiens

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<400> 2321
caattgtgtg gacgtgtcta tgtgtgtttc taattctata ctatcttgaa aatgggttcag
60
cgttctagaa atacagccac ataatttttt ttgttttgaa aaactgctca gcaaatgcat
120
acaggtcata atggcaggta acagaccatt tattgaagtg ctgaaacaaa tagaaaacaa
180
agtcaggac accatcacag agcagtactt cccttgtag atactctcag ctaagtaaga
240
attgagttag acaacaataa aacaaatacc cataggcttt tcaaacagta acaacccgct
300
caggggttagc agcattttcta gaccttgatg gtaaaatgat gttctcaacc ttgctttca
360
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420
cagaggtgga gtg
433

```

<210> 2322  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens



&lt;400&gt; 2322

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Met Leu Leu Thr Leu Ser Gly Leu Leu Leu Phe Glu Lys Pro Met Gly
 1           5           10           15
Ile Cys Phe Ile Val Val Ser Leu Asn Ser Tyr Leu Ala Glu Ser Ile
          20           25           30
Ser Gln Gly Lys Tyr Cys Ser Val Met Val Ser Trp Thr Leu Phe Ser
          35           40           45
Ile Cys Phe Ser Thr Ser Ile Asn Gly Leu Leu Pro Ala Ile Met Thr
          50           55           60
Cys Met His Leu Leu Ser Ser Phe Ser Lys Gln Lys Lys Leu Cys Gly
65           70           75           80
Cys Ile Ser Arg Thr Leu Asn His Phe Gln Asp Ser Ile Glu Leu Glu
          85           90           95
Thr His Ile Asp Thr Ser Thr Gln Leu
          100           105

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&lt;210&gt; 2323

&lt;211&gt; 532

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2323

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acgcgtcaaa actggcaaaag ctggcgggctt aggggggaggg gcaagtggac ttggaggccc
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tcctccactg tgcaccccctt tggaaaaaaa gcggagggggg catcaagtaa aagtttcttg
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ccaggcagag ccagctcggc ggccccccgc acatagctgg ggtagcagg ggttgcttct
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ccggggtctg gcagctctgc gcccggttag gagcgggctg gcgagcatta gcctgcgtcc
360
tggagaaggg gcgcagcgcc gcagttgagg ccgaagcagc ccctcgggg cgtaggatac
420
ctgtcagtga gcgccccgat tgcacggccc ccgggtagtg cctgccggcg aggggcggga
480
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532

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&lt;210&gt; 2324

&lt;211&gt; 51

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2324

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Thr Arg Gln Asn Trp Gln Ser Trp Arg Leu Arg Gly Arg Gly Lys Trp
 1           5           10           15
Thr Trp Arg Pro Ser Ser Thr Val His Pro Leu Gly Lys Lys Ala Glu
          20           25           30
Gly Ala Ser Ser Lys Ser Phe Leu Pro Gly Arg Ala Ser Ser Ala Ala
          35           40           45
Pro Arg Thr

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50

&lt;210&gt; 2325

&lt;211&gt; 459

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2325

nnacgcgtgc aggaccgcat gagcgccatc tgggagagag gagggttgg aggaaagatg  
60  
gatgagaacc gttttgtggc cgttaccagt tccaacgcag ctaagcttct gaacctgtat  
120  
ccccgcaagg gccgcattat tcccggagcc gatgctgatg tgggtggtg ggacccagaa  
180  
gccacaaaga ccatctcagc cagcacgcag gtccaggag gagacttcaa cctgtatgag  
240  
aacatgcgct gccacggcgt gccactggtc accatcagcc gggggcgcg cgtgtatgag  
300  
aacggcgctc tcatgtgcgc cgagggcacc ggcaagttct gtcccctgag gtccttccca  
360  
gacactgtct acaagaagct ggtccagaga gagaagactt taaaggtag aggagtggcc  
420  
cgcactccct acctggggga tgctgctgtt gtcgtgcac  
459

&lt;210&gt; 2326

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2326

Xaa Arg Val Gln Asp Arg Met Ser Ala Ile Trp Glu Arg Gly Val Val  
1 5 10 15  
Gly Gly Lys Met Asp Glu Asn Arg Phe Val Ala Val Thr Ser Ser Asn  
20 25 30  
Ala Ala Lys Leu Leu Asn Leu Tyr Pro Arg Lys Gly Arg Ile Ile Pro  
35 40 45  
Gly Ala Asp Ala Asp Val Val Val Trp Asp Pro Glu Ala Thr Lys Thr  
50 55 60  
Ile Ser Ala Ser Thr Gln Val Gln Gly Gly Asp Phe Asn Leu Tyr Glu  
65 70 75 80  
Asn Met Arg Cys His Gly Val Pro Leu Val Thr Ile Ser Arg Gly Arg  
85 90 95  
Val Val Tyr Glu Asn Gly Val Phe Met Cys Ala Glu Gly Thr Gly Lys  
100 105 110  
Phe Cys Pro Leu Arg Ser Phe Pro Asp Thr Val Tyr Lys Lys Leu Val  
115 120 125  
Gln Arg Glu Lys Thr Leu Lys Val Arg Gly Val Ala Arg Thr Pro Tyr  
130 135 140  
Leu Gly Asp Val Ala Val Val Val His  
145 150

&lt;210&gt; 2327

&lt;211&gt; 599

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2327

gaattccaga agatcaagta ttcctacgat gccctggaga agaagcagtt tctccccgtg  
 60  
 gcctttcctg tgggaaacgc cttctcatac taccagagca acagaggctt ccaggaagac  
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 tcagagatcc gagcagctga gaagaaattt gggagcaaca aggccgagat ggtgggtgcct  
 180  
 gactttctcg agcttttcaa ggagagagcc acagccccct tctttgtatt tcagggtgtc  
 240  
 tgtgtggggc tctgggtgcct ggatgagtag tggtactaca gcgtctttac gctatccatg  
 300  
 ctgggtggcgt tcgaggcctc gctgggtgcag cagcagatgc ggaacatgtc ggagatccgg  
 360  
 aagatgggca acaagcccca catgatccag gtctaccgaa gccgcaagtg gagggccatt  
 420  
 gccagtgatg agatcgtacc aggggacatc gtctccatcg gtgaggccgg gttccgctca  
 480  
 gtcccagtgg gagccccagc ctcagggcct ctggccaacc ctcctgcctc tgccctgcag  
 540  
 gccgctcccc acaggagaac ctgggtgcat gtgacgtgct tctgctgcga ggccgctgc  
 599

&lt;210&gt; 2328

&lt;211&gt; 199

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2328

Glu Phe Gln Lys Ile Lys Tyr Ser Tyr Asp Ala Leu Glu Lys Lys Gln  
 1 5 10 15  
 Phe Leu Pro Val Ala Phe Pro Val Gly Asn Ala Phe Ser Tyr Tyr Gln  
 20 25 30  
 Ser Asn Arg Gly Phe Gln Glu Asp Ser Glu Ile Arg Ala Ala Glu Lys  
 35 40 45  
 Lys Phe Gly Ser Asn Lys Ala Glu Met Val Val Pro Asp Phe Ser Glu  
 50 55 60  
 Leu Phe Lys Glu Arg Ala Thr Ala Pro Phe Phe Val Phe Gln Val Phe  
 65 70 75 80  
 Cys Val Gly Leu Trp Cys Leu Asp Glu Tyr Trp Tyr Tyr Ser Val Phe  
 85 90 95  
 Thr Leu Ser Met Leu Val Ala Phe Glu Ala Ser Leu Val Gln Gln Gln  
 100 105 110  
 Met Arg Asn Met Ser Glu Ile Arg Lys Met Gly Asn Lys Pro His Met  
 115 120 125  
 Ile Gln Val Tyr Arg Ser Arg Lys Trp Arg Pro Ile Ala Ser Asp Glu  
 130 135 140  
 Ile Val Pro Gly Asp Ile Val Ser Ile Gly Glu Ala Gly Phe Arg Ser  
 145 150 155 160  
 Val Pro Val Gly Ala Pro Ala Ser Gly Pro Leu Ala Asn Pro Pro Ala  
 165 170 175  
 Ser Ala Leu Gln Ala Ala Pro His Arg Arg Thr Trp Cys His Val Thr

180 185 190  
 Cys Phe Cys Cys Glu Ala Ala  
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 <211> 392  
 <212> DNA  
 <213> Homo sapiens  
 <400> 2329  
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 120  
 atgagcacgc aaccactga ggaaccactc cgactagtgt tggcattcaa tccagtgcct  
 180  
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 240  
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 300  
 acgggtgatgt ggatgctcgg ggcattgggt gtgctattcc tcgtgctttt cgtcatccag  
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 392  
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 <212> PRT  
 <213> Homo sapiens  
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 20 25 30  
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 35 40 45  
 Leu Trp Ala Leu Thr Ala Asp Ala Phe Gln Leu Ser Thr Val Met Trp  
 50 55 60  
 Met Leu Gly Ala Trp Val Val Leu Phe Leu Val Leu Phe Val Ile Gln  
 65 70 75 80  
 Asn Leu Arg Leu His Ala Ala Arg Lys Asp  
 85 90  
 <210> 2331  
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 <212> DNA  
 <213> Homo sapiens  
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 gatttaaggt gcccgagtc acgctgatgg actgccgtag acaactgaaa gacagtaagc  
 120

aaattttatc tattacaaag aactttaag ttgagaatat tggacctctt cctataactg  
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tttcgtctct gaaaattaat gggataact gccaaaggta tggattcgag gtgctggatt  
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1680  
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1740

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 1860  
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 2280  
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 2340  
 ccaccaaca tgctgtgc ctggggacat gccagtttca tcagctctcc gccctacctc  
 2400  
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 2700  
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<210> 2332

<211> 789

<212> PRT

<213> Homo sapiens

<400> 2332

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Ala	Ala	Asp	Leu	Glu	Phe	Arg	Phe	Thr	Leu	Asn	Val	Thr	Leu	Pro	His
			20					25					30		
His	Leu	Leu	Pro	Leu	Cys	Ala	Asp	Val	Val	Pro	Gly	Pro	Ser	Trp	Glu
		35				40						45			
Glu	Ser	Phe	Trp	Arg	Leu	Thr	Val	Phe	Phe	Val	Ser	Leu	Ser	Leu	Leu
	50				55						60				
Gly	Val	Ile	Leu	Ile	Ala	Phe	Gln	Gln	Ala	Gln	Tyr	Ile	Leu	Met	Glu
65				70					75				80		
Phe	Met	Lys	Thr	Arg	Gln	Arg	Gln	Asn	Ala	Ser	Ser	Ser	Ser	Gln	Gln

										85				90				95			
Asn	Asn	Gly	Pro	Met	Asp	Val	Ile	Ser	Pro	His	Ser	Tyr	Lys	Ser	Asn						
			100					105					110								
Cys	Lys	Asn	Phe	Leu	Asp	Thr	Tyr	Gly	Pro	Ser	Asp	Lys	Gly	Arg	Gly						
			115					120				125									
Lys	Asn	Cys	Leu	Pro	Val	Asn	Thr	Pro	Gln	Ser	Arg	Ile	Gln	Asn	Ala						
			130				135				140										
Ala	Lys	Arg	Ser	Pro	Ala	Thr	Tyr	Gly	His	Ser	Gln	Lys	Lys	His	Lys						
			145			150				155						160					
Cys	Ser	Val	Tyr	Tyr	Ser	Lys	His	Lys	Thr	Ser	Thr	Ala	Ala	Ala	Ser						
			165						170					175							
Ser	Thr	Ser	Thr	Thr	Thr	Glu	Glu	Lys	Gln	Thr	Ser	Pro	Leu	Gly	Ser						
			180					185					190								
Ser	Leu	Pro	Ala	Ala	Lys	Glu	Asp	Ile	Cys	Thr	Asp	Ala	Met	Arg	Glu						
			195				200					205									
Asn	Trp	Ile	Ser	Leu	Arg	Tyr	Ala	Ser	Gly	Ile	Asn	Val	Asn	Leu	Gln						
			210				215					220									
Lys	Asn	Leu	Thr	Leu	Pro	Lys	Asn	Leu	Leu	Asn	Lys	Glu	Glu	Asn	Thr						
			225			230				235					240						
Leu	Lys	Asn	Thr	Ile	Val	Phe	Ser	Asn	Pro	Ser	Ser	Glu	Cys	Ser	Met						
			245						250					255							
Lys	Glu	Gly	Ile	Gln	Thr	Cys	Met	Phe	Pro	Lys	Glu	Thr	Asp	Ile	Lys						
			260					265					270								
Thr	Ser	Glu	Asn	Thr	Ala	Glu	Phe	Lys	Glu	Arg	Glu	Leu	Cys	Pro	Leu						
			275				280					285									
Lys	Thr	Ser	Lys	Lys	Leu	Pro	Glu	Asn	His	Leu	Pro	Arg	Asn	Ser	Pro						
			290				295				300										
Gln	Tyr	His	Gln	Pro	Asp	Leu	Pro	Glu	Ile	Ser	Arg	Lys	Asn	Asn	Gly						
			305			310				315					320						
Asn	Asn	Gln	Gln	Val	Pro	Val	Lys	Asn	Glu	Val	Asp	His	Cys	Glu	Asn						
			325					330					335								
Leu	Lys	Lys	Val	Asp	Thr	Lys	Pro	Ser	Ser	Glu	Lys	Lys	Ile	His	Lys						
			340					345					350								
Thr	Ser	Arg	Glu	Asp	Met	Phe	Ser	Glu	Lys	Gln	Asp	Ile	Pro	Phe	Val						
			355				360					365									
Glu	Gln	Glu	Asp	Pro	Tyr	Arg	Lys	Lys	Lys	Leu	Gln	Glu	Lys	Arg	Glu						
			370				375				380										
Gly	Asn	Leu	Gln	Asn	Leu	Asn	Trp	Ser	Lys	Ser	Arg	Thr	Cys	Arg	Lys						
			385			390				395					400						
Asn	Lys	Lys	Arg	Gly	Val	Ala	Pro	Val	Ser	Arg	Pro	Pro	Glu	Gln	Ser						
			405						410					415							
Asp	Leu	Lys	Leu	Val	Cys	Ser	Asp	Phe	Glu	Arg	Ser	Glu	Leu	Ser	Ser						
			420																		

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      515              520              525
Asp Ser Val Ser Gln Asn Asp Phe Pro Ser Glu Ala Pro Ile Ser Leu
  530              535              540
Asn Leu Ser His Asn Ile Cys Asn Pro Met Thr Val Asn Ser Leu Pro
  545              550              555              560
Gln Tyr Ala Glu Pro Ser Cys Pro Ser Leu Pro Ala Gly Pro Thr Gly
      565              570              575
Val Glu Glu Asp Lys Gly Leu Tyr Ser Pro Gly Asp Leu Trp Pro Thr
      580              585              590
Pro Pro Val Cys Val Thr Ser Ser Leu Asn Cys Thr Leu Glu Asn Gly
      595              600              605
Val Pro Cys Val Ile Gln Glu Ser Ala Pro Val His Asn Ser Phe Ile
      610              615              620
Asp Trp Ser Ala Thr Cys Glu Gly Gln Phe Ser Ser Ala Tyr Cys Pro
      625              630              635              640
Leu Glu Leu Asn Asp Tyr Asn Ala Phe Pro Glu Glu Asn Met Asn Tyr
      645              650              655
Ala Asn Gly Phe Pro Cys Pro Ala Asp Val Gln Thr Asp Phe Ile Asp
      660              665              670
His Asn Ser Gln Ser Thr Trp Asn Thr Pro Pro Asn Met Pro Ala Ala
      675              680              685
Trp Gly His Ala Ser Phe Ile Ser Ser Pro Pro Tyr Leu Thr Ser Thr
      690              695              700
Arg Ser Leu Ser Pro Met Ser Gly Leu Phe Gly Ser Ile Trp Ala Pro
      705              710              715              720
Gln Ser Asp Val Tyr Glu Asn Cys Cys Pro Ile Asn Pro Thr Thr Glu
      725              730              735
His Ser Thr His Met Glu Asn Gln Ala Val Val Cys Lys Glu Tyr Tyr
      740              745              750
Pro Gly Phe Asn Pro Phe Arg Ala Tyr Met Asn Leu Asp Ile Trp Thr
      755              760              765
Thr Thr Ala Asn Arg Asn Ala Asn Phe Pro Leu Ser Arg Asp Ser Ser
      770              775              780
Tyr Cys Gly Asn Val
785

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&lt;210&gt; 2333

&lt;211&gt; 501

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2333

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60
gaagtaataa atatgaatgg ggtgtatcat ataatgaaca acgaatatcc atagtgca
120
gacgaagtgc ttcacaaagc aaaatcatat ttgtcagcag atgaatatga gtatgtttta
180
aaaagctatc atattgctta tgaagcacat aaaggtcagt tccgaaaaaa cggattacca
240
tacattatgc atcctataca agttgcaggt attttaacag aaatgcgatt agacggaccg
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acgattgtcg cagggtttttt gcatgatgta attgaagata caccgtatac atttgaagat
360

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gtaaaagaaa tgttcaatga agaagttgct cgaattgttg atggtgtgac gaagcttaaa  
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 aaaataaaat accgctcaaa agaagaacaa caagctgaaa atcatcgcaa gttattttatt  
 480  
 gcgattgccca aagatgtacg c  
 501

<210> 2334  
 <211> 143  
 <212> PRT  
 <213> Homo sapiens

<400> 2334  
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 Asp Glu Val Leu His Lys Ala Lys Ser Tyr Leu Ser Ala Asp Glu Tyr  
 20 25 30  
 Glu Tyr Val Leu Lys Ser Tyr His Ile Ala Tyr Glu Ala His Lys Gly  
 35 40 45  
 Gln Phe Arg Lys Asn Gly Leu Pro Tyr Ile Met His Pro Ile Gln Val  
 50 55 60  
 Ala Gly Ile Leu Thr Glu Met Arg Leu Asp Gly Pro Thr Ile Val Ala  
 65 70 75 80  
 Gly Phe Leu His Asp Val Ile Glu Asp Thr Pro Tyr Thr Phe Glu Asp  
 85 90 95  
 Val Lys Glu Met Phe Asn Glu Glu Val Ala Arg Ile Val Asp Gly Val  
 100 105 110  
 Thr Lys Leu Lys Lys Ile Lys Tyr Arg Ser Lys Glu Glu Gln Gln Ala  
 115 120 125  
 Glu Asn His Arg Lys Leu Phe Ile Ala Ile Ala Lys Asp Val Arg  
 130 135 140

<210> 2335  
 <211> 387  
 <212> DNA  
 <213> Homo sapiens

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<210> 2336

<211> 106  
 <212> PRT  
 <213> Homo sapiens

<400> 2336  
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                   20                  25                  30  
 Phe Ile His Thr Leu Thr Arg Leu Gln Leu Glu Gln Glu Ala Glu Ser  
                   35                  40                  45  
 Phe Arg Glu Leu Glu Ala Pro Ala Gln Gly Ser Pro Pro Ser Pro Gly  
                   50                  55                  60  
 Glu Glu Ala Leu Val Pro Thr Phe Pro Leu Ala Lys Pro Pro Met Asn  
                   65                  70                  75                  80  
 Asn Glu Leu Gly Asp Asn Ser Cys Ser Ser Asp Met Thr Asp Ser Ser  
                   85                  90                  95  
 Thr Ala Ser Ser Ser Ala Ser Gly Thr Ser  
                   100                  105

<210> 2337  
 <211> 359  
 <212> DNA  
 <213> Homo sapiens

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           120  
 ttctctgcac cagcttcctt gctgggctcc agggcccaca ggctgaggcc gggggcccag  
           180  
 ggggtcaatgc caggcaccct gctattgagg aacctatcca ggaggaagga ctcgggcaga  
           240  
 cctgcgggat cctcgtcctc ccacgggtcc tcatggcaga agcagaagga gctggagtcg  
           300  
 ctgaggtccg tgggcaggcg ggctggggcc aacgtggggt caccgacctc ctcaaagct  
           359

<210> 2338  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 2338  
 Met Cys Ser Ser Arg Met Ala Ser Gly Pro Ser Ala Ser Gly Gln Gly  
           1                  5                  10                  15  
 Lys Gly Ser Phe Ser Ala Pro Ala Ser Leu Leu Gly Ser Arg Ala His  
                   20                  25                  30  
 Arg Leu Arg Pro Gly Ala Gln Gly Ser Met Pro Gly Thr Leu Leu Leu  
                   35                  40                  45  
 Arg Asn Leu Ser Arg Arg Lys Asp Ser Gly Arg Pro Ala Gly Ser Ser  
                   50                  55                  60  
 Ser Ser His Gly Ser Ser Trp Gln Lys Gln Lys Glu Leu Glu Ser Leu

65                                70                                75                                80  
 Arg Ser Val Gly Arg Arg Ala Gly Pro Asn Val Gly Ser Pro Thr Ser  
                               85                                90                                95  
 Ser Lys

<210> 2339  
 <211> 439  
 <212> DNA  
 <213> Homo sapiens

<400> 2339  
 acgcgtggcg tcagtccagg cagacttggg aggtcgccca caccgtcaac tcggttgcca  
 60  
 ccctgtccctc caccttcgtc gtcgcagtcg tcagtgtcct gtggtttgtg ccctccgggc  
 120  
 actggtcccg gtagggtctg taatgctggg gcgtcggcg cgatgtgcca gttccttggg  
 180  
 gagttactcc tctacactgg tgtgaacaag accggagaat tccccccat attctcgttt  
 240  
 cccgctcgtc ccgcacgtca ttgggactgg cttttacgcg gtagtggttg ccgtactctg  
 300  
 gttgctctgc ggcacggtcg gcagggggat catgtcatga gtccgacggg gagcgagcgg  
 360  
 cgtcttagcg cgccaatgcg acgtggcatc gtggcactgt gcgtggcgat ggccttcgtg  
 420  
 ttgtcggggg gcggtgctg  
 439

<210> 2340  
 <211> 92  
 <212> PRT  
 <213> Homo sapiens

<400> 2340  
 Met Cys Gln Phe Leu Gly Glu Leu Leu Leu Tyr Thr Gly Val Asn Lys  
   1                              5                              10                              15  
 Thr Gly Glu Phe Pro Pro Ile Phe Ser Phe Pro Ala Arg Pro Ala Arg  
                               20                              25                              30  
 His Trp Asp Trp Leu Leu Arg Gly Ser Gly Cys Arg Thr Leu Val Ala  
                               35                              40                              45  
 Leu Arg His Gly Arg Gln Gly Asp His Val Met Ser Pro Thr Val Ser  
                               50                              55                              60  
 Glu Arg Arg Leu Ser Ala Pro Met Arg Arg Gly Ile Val Ala Leu Cys  
   65                              70                              75                              80  
 Val Ala Met Ala Phe Val Leu Ser Gly Cys Gly Ala  
                               85                              90

<210> 2341  
 <211> 411  
 <212> DNA  
 <213> Homo sapiens

<400> 2341

gccaaacctc ccctccatcc tgcccaagat ggatcttgct gagcctccct ggcatatgcc  
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 tctgcaggag gagccagagg aggtcacgga ggaggaggag gaaagggag aagaggagag  
 120  
 ggagaaggaa gcagaggagg agggaggaaga ggaagagctg ctctctgtgag cgggtcccca  
 180  
 ggagccaccg cacaggccca tgccccttca cctagcacca gcagcagcac cagcagccag  
 240  
 agtcctgggg ccacccggca caggcaggag gattctggag accaggccac atcaggcnat  
 300  
 ggaagtggag agcagtgtga aaccacacct gtcagtggcc tcagtcaccc caagtacagt  
 360  
 ggccccgggg gttcagaact atagccagga gtctgggggc actgagtggc n  
 411

<210> 2342

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2342

Ala Ser Leu Ala Tyr Ala Ser Ala Gly Gly Ala Arg Gly Gly His Gly  
 1 5 10 15  
 Gly Gly Gly Gly Lys Gly Arg Arg Gly Glu Gly Ser Arg Gly  
 20 25 30  
 Gly Gly Gly Arg Gly Arg Ala Ala Pro Val Ser Gly Ser Pro Gly Ala  
 35 40 45  
 Thr Ala Gln Ala His Ala Pro Ser Pro Ser Thr Ser Ser Thr Ser  
 50 55 60  
 Ser Gln Ser Pro Gly Ala Thr Arg His Arg Gln Glu Asp Ser Gly Asp  
 65 70 75 80  
 Gln Ala Thr Ser Gly Xaa Gly Ser Gly Glu Gln Cys Glu Thr His Leu  
 85 90 95  
 Val Ser Ala Leu Ser His Pro Lys Tyr Ser Gly Pro Gly Gly Ser Glu  
 100 105 110  
 Leu

<210> 2343

<211> 522

<212> DNA

<213> Homo sapiens

<400> 2343

ggcccgagc agatgctgat gccttcacag tttcccaacc agggccagca gggattctct  
 60  
 ggaggccagg gaccctacca agccatgtcc caggacatgg gcaataccca agacatgttc  
 120  
 agccctgac agagctcaat gcccatgagc aacgtgggca ccacccggct cagccacatg  
 180  
 cctctgcccc ctgcgtccaa tcctcctggg accgtgcatt cagccccaaa ccgggggcta  
 240  
 ggtaggcggc cttcgacact caccatcagt attaatacaga tggggtcacc gggcatgggg  
 300

cacttgaagt cgccaccct tagccagtg cactcaccct tggtcacctc gccctctgcc  
 360  
 aacctcaagt caccacagac tccctcacag atgggtgccct tgccttctgc caaccgcca  
 420  
 ggacctctca agtcgcccc ggtcctcggc tctcctctca gtgtcgggtc acccaactggc  
 480  
 tcgcccagca ggctcaagtc tccttccatg gcgggtgcctt ct  
 522

<210> 2344

<211> 174

<212> PRT

<213> Homo sapiens

<400> 2344

Gly	Pro	Gln	Lys	Met	Leu	Met	Pro	Ser	Gln	Phe	Pro	Asn	Gln	Gly	Gln
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Gln	Gly	Phe	Ser	Gly	Gly	Gln	Gly	Pro	Tyr	Gln	Ala	Met	Ser	Gln	Asp
		20					25						30		
Met	Gly	Asn	Thr	Gln	Asp	Met	Phe	Ser	Pro	Asp	Gln	Ser	Ser	Met	Pro
	35					40					45				
Met	Ser	Asn	Val	Gly	Thr	Thr	Arg	Leu	Ser	His	Met	Pro	Leu	Pro	Pro
	50				55						60				
Ala	Ser	Asn	Pro	Pro	Gly	Thr	Val	His	Ser	Ala	Pro	Asn	Arg	Gly	Leu
65					70					75				80	
Gly	Arg	Arg	Pro	Ser	Asp	Leu	Thr	Ile	Ser	Ile	Asn	Gln	Met	Gly	Ser
		85						90						95	
Pro	Gly	Met	Gly	His	Leu	Lys	Ser	Pro	Thr	Leu	Ser	Gln	Val	His	Ser
	100						105						110		
Pro	Leu	Val	Thr	Ser	Pro	Ser	Ala	Asn	Leu	Lys	Ser	Pro	Gln	Thr	Pro
	115					120						125			
Ser	Gln	Met	Val	Pro	Leu	Pro	Ser	Ala	Asn	Pro	Pro	Gly	Pro	Leu	Lys
	130					135					140				
Ser	Pro	Gln	Val	Leu	Gly	Ser	Ser	Leu	Ser	Val	Arg	Ser	Pro	Thr	Gly
145				150					155					160	
Ser	Pro	Ser	Arg	Leu	Lys	Ser	Pro	Ser	Met	Ala	Val	Pro	Ser		
			165					170							

<210> 2345

<211> 561

<212> DNA

<213> Homo sapiens

<400> 2345

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 ggctccacc agcccgcgtc caggccgcct gggctcgacg cgctggacag gcgccggcgg  
 120  
 ctggcgctgc cgcccttttg ccgtttccgc cttttcttgc gcttctgggtg cttgctggag  
 180  
 gcctgcgcgc ccgcctcgcc tgcgctgtcc gagtccttgg cgctgtcgga cgtgagtgac  
 240  
 tcgcagttct gcagccgcag gtccgactcg ctctccacca tagctattaa tgccaagaat  
 300

gcaaatgaaa agaatatcat ctgggtgaat taccttctta gcaatcctga gtacaaggac  
 360  
 acacccatgg acatcgacaca gctcccccat ctgccggaga aaacttccga atcctcggag  
 420  
 acatccgact ctgagtcaga ctctaaagac acctcaggta ttacagagga caacgagaac  
 480  
 tccaagnntc cgacgagaag gggaaccagt ccgagaacag cgaagacccg gagcccgacc  
 540  
 ggaagaagtc gggcaacgcg t  
 561

<210> 2346

<211> 187

<212> PRT

<213> Homo sapiens

<400> 2346

Xaa Ile Ser Val Leu Ile Leu Ser Thr Glu Ala Leu Gly Gly Glu Asp  
 1 5 10 15  
 Ser Ser Arg Gly Gly Leu His Gln Pro Ala Ser Arg Pro Pro Gly Leu  
 20 25 30  
 Asp Ala Leu Asp Arg Arg Arg Arg Leu Ala Leu Pro Pro Phe Cys Arg  
 35 40 45  
 Phe Arg Leu Phe Leu Arg Phe Trp Cys Leu Leu Glu Ala Cys Ala Pro  
 50 55 60  
 Ala Ser Pro Ala Leu Ser Glu Ser Leu Ala Leu Ser Asp Val Ser Asp  
 65 70 75 80  
 Ser Gln Phe Cys Ser Arg Arg Ser Asp Ser Leu Ser Thr Ile Ala Ile  
 85 90 95  
 Asn Ala Lys Asn Ala Asn Glu Lys Asn Ile Ile Trp Val Asn Tyr Leu  
 100 105 110  
 Leu Ser Asn Pro Glu Tyr Lys Asp Thr Pro Met Asp Ile Ala Gln Leu  
 115 120 125  
 Pro His Leu Pro Glu Lys Thr Ser Glu Ser Ser Glu Thr Ser Asp Ser  
 130 135 140  
 Glu Ser Asp Ser Lys Asp Thr Ser Gly Ile Thr Glu Asp Asn Glu Asn  
 145 150 155 160  
 Ser Lys Xaa Pro Thr Arg Arg Gly Thr Ser Pro Arg Thr Ala Lys Thr  
 165 170 175  
 Arg Ser Pro Thr Gly Arg Ser Arg Ala Thr Arg  
 180 185

<210> 2347

<211> 375

<212> DNA

<213> Homo sapiens

<400> 2347

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 gagaacgtcg agtacgcctg cgccgcgccg gaagtactga aggggtgaata cagccgtaac  
 120  
 gtcggtccga acatcgacgc ctggtccgat ttccagccgc tgggcgtggt ggcggggatc  
 180

acgccattca acttcccgcc gatggtgccc ctgtggatgt atccgttggc gatcgtttgc  
 240  
 ggtaactgct ttatcctcaa gccgtccgag cgtgatccga gctcgacctt gctgatcgcc  
 300  
 cagctgttgc aggaagccgg ttgccccaaa ggtgtgctga acgtggtgca tggtgacaag  
 360  
 accgcggtgg acgcg  
 375

<210> 2348

<211> 125

<212> PRT

<213> Homo sapiens

<400> 2348

Ile	Ser	Glu	Glu	His	Gly	Arg	Thr	Leu	Glu	Asp	Ala	Ala	Gly	Glu	Leu
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Lys	Arg	Gly	Ile	Glu	Asn	Val	Glu	Tyr	Ala	Cys	Ala	Ala	Pro	Glu	Val
		20						25					30		
Leu	Lys	Gly	Glu	Tyr	Ser	Arg	Asn	Val	Gly	Pro	Asn	Ile	Asp	Ala	Trp
		35					40					45			
Ser	Asp	Phe	Gln	Pro	Leu	Gly	Val	Val	Ala	Gly	Ile	Thr	Pro	Phe	Asn
	50				55					60					
Phe	Pro	Ala	Met	Val	Pro	Leu	Trp	Met	Tyr	Pro	Leu	Ala	Ile	Val	Cys
65				70					75					80	
Gly	Asn	Cys	Phe	Ile	Leu	Lys	Pro	Ser	Glu	Arg	Asp	Pro	Ser	Ser	Thr
			85						90				95		
Leu	Leu	Ile	Ala	Gln	Leu	Leu	Gln	Glu	Ala	Gly	Leu	Pro	Lys	Gly	Val
		100					105					110			
Leu	Asn	Val	Val	His	Gly	Asp	Lys	Thr	Ala	Val	Asp	Ala			
	115						120					125			

<210> 2349

<211> 417

<212> DNA

<213> Homo sapiens

<400> 2349

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 gctgacaaag tttttggtgt cccaggagat ttaaatctag cctttttaga tgatattatt  
 120  
 gcacataatc atattaaatg gattggtaat acaaatgaac ttaatgcaag ttatgccgct  
 180  
 gacggatatg cacgtattaa tggcatcggg gcaatggtaa caacatttgg agtgggtgaa  
 240  
 ttaagtgtct tcaacggaat cgctggatct tatgctgagc gtgtaccagt tattgccatc  
 300  
 actggggcac ctactcgagc tgtagaacia gaaggcaaat acgttcacca ttcccttggc  
 360  
 gaaggaaactt ttgatgatta tagaaaaatg tttgagccta ttacaacagc gcaagct  
 417

<210> 2350

<211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 2350  
 Xaa Lys Lys Lys Lys Lys Lys Lys Thr Gln Tyr Leu Met Asp Ala Val  
 1 5 10 15  
 Tyr Ser Ala Gly Ala Asp Lys Val Phe Gly Val Pro Gly Asp Phe Asn  
 20 25 30  
 Leu Ala Phe Leu Asp Asp Ile Ile Ala His Asn His Ile Lys Trp Ile  
 35 40 45  
 Gly Asn Thr Asn Glu Leu Asn Ala Ser Tyr Ala Ala Asp Gly Tyr Ala  
 50 55 60  
 Arg Ile Asn Gly Ile Gly Ala Met Val Thr Thr Phe Gly Val Gly Glu  
 65 70 75 80  
 Leu Ser Ala Val Asn Gly Ile Ala Gly Ser Tyr Ala Glu Arg Val Pro  
 85 90 95  
 Val Ile Ala Ile Thr Gly Ala Pro Thr Arg Ala Val Glu Gln Glu Gly  
 100 105 110  
 Lys Tyr Val His His Ser Leu Gly Glu Gly Thr Phe Asp Asp Tyr Arg  
 115 120 125  
 Lys Met Phe Glu Pro Ile Thr Thr Ala Gln Ala  
 130 135

<210> 2351  
 <211> 696  
 <212> DNA  
 <213> Homo sapiens

<400> 2351  
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 60  
 ggctccgccc agctgtgcga ccgttcctgg atcaccgacc agtatgaccg gttcgtgcgt  
 120  
 ggcaatactg tgctcgctca gccgaatgat gccggcatga ttcgtattga cgacaacctc  
 180  
 ggcatcgcgc tgcctctgga cgctaacgga cgccagacca cccttaacct gtatcttggc  
 240  
 gcccagctgg ctctttgcga ggcttaccgg aatgtggctg tctctggcgc aactccggtg  
 300  
 gctgtcactg attgcctcaa ttatgggtccc ccgtacgac ccgatgtcat gtggcaattc  
 360  
 gacgagacca tccttggtct ggttgacggc tgccgcgagc ttggcgtgcc ggttacgggc  
 420  
 ggtaacgttt ccctgcacaa ccgcaactgga gatgagtcga ttcggcctac tccgctcgtt  
 480  
 ggtgtgctcg gcgttattga tgacgtgcat cgctcgcaccc cgctggcctt cgcacacgac  
 540  
 ggcgacgctg tcttgctgct aggaacgacg aagtgcgagt tcggcggtac ggtctatgag  
 600  
 gacgtcatcc acgctggcca cctaggcggt atgccccga tgccccacct gaatgccgag  
 660  
 aaggccctgg ccgcggtgat ggtggaagcg tcgaag  
 696



<210> 2352  
 <211> 232  
 <212> PRT  
 <213> Homo sapiens

<400> 2352  
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 Leu Ala Leu Val Gly Ser Ala Gln Leu Cys Asp Arg Ser Trp Ile Thr  
 20 25 30  
 Asp Gln Tyr Asp Arg Phe Val Arg Gly Asn Thr Val Leu Ala Gln Pro  
 35 40 45  
 Asn Asp Ala Gly Met Ile Arg Ile Asp Asp Asn Leu Gly Ile Ala Leu  
 50 55 60  
 Ser Leu Asp Ala Asn Gly Arg Gln Thr Thr Leu Asn Pro Tyr Leu Gly  
 65 70 75 80  
 Ala Gln Leu Ala Leu Cys Glu Ala Tyr Arg Asn Val Ala Val Ser Gly  
 85 90 95  
 Ala Thr Pro Val Ala Val Thr Asp Cys Leu Asn Tyr Gly Ser Pro Tyr  
 100 105 110  
 Asp Pro Asp Val Met Trp Gln Phe Asp Glu Thr Ile Leu Gly Leu Val  
 115 120 125  
 Asp Gly Cys Arg Glu Leu Gly Val Pro Val Thr Gly Gly Asn Val Ser  
 130 135 140  
 Leu His Asn Arg Thr Gly Asp Glu Ser Ile Arg Pro Thr Pro Leu Val  
 145 150 155 160  
 Gly Val Leu Gly Val Ile Asp Asp Val His Arg Arg Ile Pro Ser Ala  
 165 170 175  
 Phe Ala His Asp Gly Asp Ala Val Leu Leu Gly Thr Thr Lys Cys  
 180 185 190  
 Glu Phe Gly Gly Ser Val Tyr Glu Asp Val Ile His Ala Gly His Leu  
 195 200 205  
 Gly Gly Met Pro Pro Met Pro Asp Leu Asn Ala Glu Lys Ala Leu Ala  
 210 215 220  
 Ala Val Met Val Glu Ala Ser Lys  
 225 230

<210> 2353  
 <211> 422  
 <212> DNA  
 <213> Homo sapiens

<400> 2353  
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 atttcagggtg atgtttcaga ctttgcagat gccaaagcgtg tggtagatca agcgattaca  
 120  
 gaactcgggtt ctggtgatgt cttgggtcaac aatgctggga tcaactcaaga tacgcttatg  
 180  
 ctcaagatga ccgaagaaga ctttgaaaaa gtgattaaga tcaacttgac aggtgccttc  
 240  
 aacatgacgc aagcagtcctt gaaacagatg atcaaggcac gtgaagggtgc gattatcaac  
 300

atgtctagtg tggtcggttt gatgggaaat atcggacaag ccaactatgc agcttctaaa  
 360  
 gcaggcttga ttggttttac caagtcagtt gcacgtgaag ttgccaatcg caacgtacgc  
 420  
 gt  
 422

<210> 2354  
 <211> 140  
 <212> PRT  
 <213> Homo sapiens

<400> 2354  
 Xaa Ala Ile Ser Glu Leu Leu Ala Glu Phe Ser Asn Tyr Gly Val  
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 Lys Val Val Pro Ile Ser Gly Asp Val Ser Asp Phe Ala Asp Ala Lys  
 20 25 30  
 Arg Met Val Asp Gln Ala Ile Thr Glu Leu Gly Ser Val Asp Val Leu  
 35 40 45  
 Val Asn Asn Ala Gly Ile Thr Gln Asp Thr Leu Met Leu Lys Met Thr  
 50 55 60  
 Glu Glu Asp Phe Glu Lys Val Ile Lys Ile Asn Leu Thr Gly Ala Phe  
 65 70 75 80  
 Asn Met Thr Gln Ala Val Leu Lys Gln Met Ile Lys Ala Arg Glu Gly  
 85 90 95  
 Ala Ile Ile Asn Met Ser Ser Val Val Gly Leu Met Gly Asn Ile Gly  
 100 105 110  
 Gln Ala Asn Tyr Ala Ala Ser Lys Ala Gly Leu Ile Gly Phe Thr Lys  
 115 120 125  
 Ser Val Ala Arg Glu Val Ala Asn Arg Asn Val Arg  
 130 135 140

<210> 2355  
 <211> 5191  
 <212> DNA  
 <213> Homo sapiens

<400> 2355  
 cttgccaaagt ttgacggtga agtgatctgt gaacctccca acaacaaact ggacaaattc  
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 agcggaaacc tctactggaa ggaaaaataag ttccctctga gcaaccagaa catgctgctg  
 120  
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 180  
 gacactaagc tgatgcaaaa cagcggcaga acaaagttca aaagaacgag tatcgatcgc  
 240  
 ctaatgaata ccctggtgct ctggattttt ggattcctgg tttgcatggg ggtgatcctg  
 300  
 gccattggca atgccatctg ggagcacgag gtggggatgc gtttccaggt ctacctgccg  
 360  
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 420  
 atcatcctca acaccgtgtg gccatttca ctctatgtca gtgtggaggt catccgtctg  
 480

ggccacagct acttcatcaa ctgggataag aagatgttct gcatgaagaa gcggacgcct  
540  
gcagaagccc gcaccaccac cctaaacgag gagctggggc aggtggagta catcttctcc  
600  
gacaagacgg gcacctcac ccagaacatc atggttttca acaagtgtc catcaatggc  
660  
cacagctatg gtgatgtgtt tgacgtcctg ggacacaaag ctgaattggg agagaggcct  
720  
gaacctgttg acttctcctt caatcctctg gctgacaaga agttcttatt ttgggacccc  
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900  
cagtccccag ataggggggc cctgggtacc gcagccagga actttgggtt tgttttccgc  
960  
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1020  
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1140  
cactccactc aagagctgct caacaccacc atggaccacc ttaatgagta cgcaggggaa  
1200  
gggctgagga ccctgggtct ggcctacaag gatctggatg aagagtacta cgaggagtgg  
1260  
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1320  
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1380  
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1440  
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1740  
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1800  
cccttgca gaaggcacagg gttagaactg gtcaagaagt acaagaaggc tgtgacgctt  
1860  
gccattggag acggagccaa tgatgtcagc atgatcaaaa cggtcacat tgggtgtggg  
1920  
atcagtgggc aggaagggat ccaggctgtc ttggcctccg attactcctt ctcccagttc  
1980  
aagtctctgc agcgctcct gctggtgcat gggcgctggt cctacctgcg aatgtgcaag  
2040  
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2100  
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2160

atcgtgtaca cctccctgcc agtcctggct atgggggtct ttgatcagga tgtcccgag  
2220  
cagcggagca tggagtaccc taagctgtat gagccgggcc agctgaacct tctcttcaac  
2280  
aagcgggagt tcttcatctg catcgcccag ggcacatata cctccgtgct catgttcttc  
2340  
attccctatg ggggtgttgc tgatgccacc cgggatgatg gcactcagct ggtgactac  
2400  
cagtcctttg cagtcactgt ggccacatcc ttggtcattg tggtagcgt gcagattggg  
2460  
ctcgacacag gctactggac ggccatcaac cacttcttca tctggggaag ccttgctgtt  
2520  
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2580  
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2640  
gtgtcacca cagtcgtctg catcatgccc gtggttgctc tccgattcct caggctcaac  
2700  
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5191

&lt;210&gt; 2356

&lt;211&gt; 1000

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2356

Leu Ala Lys Phe Asp Gly Glu Val Ile Cys Glu Pro Pro Asn Asn Lys  
 1 5 10 15  
 Leu Asp Lys Phe Ser Gly Thr Leu Tyr Trp Lys Glu Asn Lys Phe Pro  
 20 25 30  
 Leu Ser Asn Gln Asn Met Leu Leu Arg Gly Cys Val Leu Arg Asn Thr  
 35 40 45  
 Glu Trp Cys Phe Gly Leu Val Ile Phe Ala Gly Pro Asp Thr Lys Leu  
 50 55 60  
 Met Gln Asn Ser Gly Arg Thr Lys Phe Lys Arg Thr Ser Ile Asp Arg  
 65 70 75 80  
 Leu Met Asn Thr Leu Val Leu Trp Ile Phe Gly Phe Leu Val Cys Met  
 85 90 95  
 Gly Val Ile Leu Ala Ile Gly Asn Ala Ile Trp Glu His Glu Val Gly  
 100 105 110  
 Met Arg Phe Gln Val Tyr Leu Pro Trp Asp Glu Ala Val Asp Ser Ala  
 115 120 125  
 Phe Phe Ser Gly Phe Leu Ser Phe Trp Ser Tyr Ile Ile Ile Leu Asn  
 130 135 140  
 Thr Val Val Pro Ile Ser Leu Tyr Val Ser Val Glu Val Ile Arg Leu  
 145 150 155 160  
 Gly His Ser Tyr Phe Ile Asn Trp Asp Lys Lys Met Phe Cys Met Lys  
 165 170 175  
 Lys Arg Thr Pro Ala Glu Ala Arg Thr Thr Thr Leu Asn Glu Glu Leu  
 180 185 190  
 Gly Gln Val Glu Tyr Ile Phe Ser Asp Lys Thr Gly Thr Leu Thr Gln  
 195 200 205  
 Asn Ile Met Val Phe Asn Lys Cys Ser Ile Asn Gly His Ser Tyr Gly  
 210 215 220  
 Asp Val Phe Asp Val Leu Gly His Lys Ala Glu Leu Gly Glu Arg Pro  
 225 230 235 240  
 Glu Pro Val Asp Phe Ser Phe Asn Pro Leu Ala Asp Lys Lys Phe Leu  
 245 250 255  
 Phe Trp Asp Pro Ser Leu Leu Glu Ala Val Lys Ile Gly Asp Pro His  
 260 265 270  
 Thr His Glu Phe Phe Arg Leu Leu Ser Leu Cys His Thr Val Met Ser  
 275 280 285  
 Glu Glu Lys Asn Glu Gly Glu Leu Tyr Tyr Lys Ala Gln Ser Pro Asp  
 290 295 300  
 Glu Gly Ala Leu Val Thr Ala Ala Arg Asn Phe Gly Phe Val Phe Arg  
 305 310 315 320  
 Ser Arg Thr Pro Lys Thr Ile Thr Val His Glu Met Gly Thr Ala Ile  
 325 330 335  
 Thr Tyr Gln Leu Leu Ala Ile Leu Asp Phe Asn Asn Ile Arg Lys Arg  
 340 345 350  
 Met Ser Val Ile Val Arg Asn Pro Glu Gly Lys Ile Arg Leu Tyr Cys  
 355 360 365  
 Lys Gly Ala Asp Thr Ile Leu Leu Asp Arg Leu His His Ser Thr Gln  
 370 375 380  
 Glu Leu Leu Asn Thr Thr Met Asp His Leu Asn Glu Tyr Ala Gly Glu  
 385 390 395 400  
 Gly Leu Arg Thr Leu Val Leu Ala Tyr Lys Asp Leu Asp Glu Glu Tyr  
 405 410 415  
 Tyr Glu Glu Trp Ala Glu Arg Arg Leu Gln Ala Ser Leu Ala Gln Asp

[illegible]

```

      850              855              860
Gly Asn Ala Gln Asn Thr Leu Ala Gln Pro Thr Val Trp Leu Thr Ile
865              870              875              880
Val Leu Thr Thr Val Val Cys Ile Met Pro Val Val Ala Phe Arg Phe
      885              890              895
Leu Arg Leu Asn Leu Lys Pro Asp Leu Ser Asp Thr Val Arg Tyr Thr
      900              905              910
Gln Leu Val Arg Lys Lys Gln Lys Ala Gln His Arg Cys Met Arg Arg
      915              920              925
Val Gly Arg Thr Gly Ser Arg Arg Ser Gly Tyr Ala Phe Ser His Gln
      930              935              940
Glu Gly Phe Gly Glu Leu Ile Met Ser Gly Lys Asn Met Arg Leu Ser
945              950              955              960
Ser Leu Ala Leu Ser Ser Phe Thr Thr Arg Ser Ser Ser Ser Trp Ile
      965              970              975
Glu Ser Leu Arg Arg Lys Lys Ser Asp Ser Ala Ser Ser Pro Ser Gly
      980              985              990
Gly Ala Asp Lys Pro Leu Lys Gly
      995              1000

```

<210> 2357  
 <211> 408  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2357
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ggcgaccatc cttgccacca ttaccattgc cgccctagtgc ctcacgggct gtaatacggc
120
ggtgcgccaa acggtgaaga cgaggtttcc cgcaagctca tcaccgtgtg ggggtgctgag
180
ccacaaaacc cactcctgcc agccgacacc aatgaaaccg gcggcacgaa agtcacacc
240
gccttggttc cgggcctggt gtattacgac gccgacggca aaaccataa tgatgtggcc
300
aaatccattg acttcgatgg cgaccgcacc tacacggtga cgctgcggaa aaccagattc
360
gccgacggta ctgaggtgaa ggcccataat tttgtgaaag ctgccgca
408

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<210> 2358  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2358
Tyr Gly Gly Ala Pro Asn Gly Glu Asp Glu Val Ser Arg Lys Leu Ile
1      5      10      15
Thr Val Trp Gly Ala Glu Pro Gln Asn Pro Leu Leu Pro Ala Asp Thr
20      25      30
Asn Glu Thr Gly Gly Thr Lys Val Ile Thr Ala Leu Phe Ala Gly Leu
35      40      45
Val Tyr Tyr Asp Ala Asp Gly Lys Thr His Asn Asp Val Ala Lys Ser

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50                      55                      60  
 Ile Asp Phe Asp Gly Asp Arg Thr Tyr Thr Val Thr Leu Arg Lys Thr  
 65                      70                      75                      80  
 Arg Phe Ala Asp Gly Thr Glu Val Lys Ala His Asn Phe Val Lys Ala  
                     85                      90                      95  
 Ala Ala

<210> 2359  
 <211> 324  
 <212> DNA  
 <213> Homo sapiens

<400> 2359  
 aacctgaaca tggtgggatt gagagagccc gaggtgtatg ggtcggaaac attggccgac  
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 gttgagcaga cgtgtcgtga gtacggcgaa gaacttgggc ttgtaattga gtttcagcaa  
 120  
 accaatcacg aagggcaaat gattgaatgg attcaccacg cccgtagaag gattgcgggg  
 180  
 attgtgatca atccaggagc atggacccat acatcggcag ccatccacga tgcgttgatt  
 240  
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 300  
 aggcattttt cctacgtgtc acgc  
 324

<210> 2360  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

<400> 2360  
 Asn Leu Asn Met Leu Gly Leu Arg Glu Pro Glu Val Tyr Gly Ser Glu  
 1                      5                      10                      15  
 Thr Leu Ala Asp Val Glu Gln Thr Cys Arg Glu Tyr Gly Glu Glu Leu  
                     20                      25                      30  
 Gly Leu Val Ile Glu Phe Gln Gln Thr Asn His Glu Gly Gln Met Ile  
                     35                      40                      45  
 Glu Trp Ile His His Ala Arg Arg Arg Ile Ala Gly Ile Val Ile Asn  
                     50                      55                      60  
 Pro Gly Ala Trp Thr His Thr Ser Ala Ala Ile His Asp Ala Leu Ile  
 65                      70                      75                      80  
 Ala Ala Glu Val Pro Val Ile Glu Val His Ile Ser Asn Val His Arg  
                     85                      90                      95  
 Arg Glu Asp Phe Arg His Phe Ser Tyr Val Ser Arg  
                     100                      105

<210> 2361  
 <211> 398  
 <212> DNA  
 <213> Homo sapiens

<400> 2361

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 gtcaggggacc ggtatggaag cctcagtagg gctggagccc catcatgccc cttccgagca  
 120  
 gatcaacaca gaccagctgg tcaaggggga cctccatccc tgcctgttcc tcacggagct  
 180  
 gtagggagag tcccaaaggc aggtggtggg gctggggcct ccaacagctg ggtcctctca  
 240  
 tatcacttaa ggcccaacag cacacagtct cccaagtgtg ccaggtgcca caacacggcc  
 300  
 atccccgtct cacagctcca ccccgctgc ctgcctgcca ccattctccac aaacatatgc  
 360  
 tgcagctcca caccgggaa acaccacatg ctgcctt  
 398

<210> 2362

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2362

Met	Pro	Leu	Pro	Ser	Arg	Ser	Thr	Gln	Thr	Ser	Trp	Ser	Arg	Gly	Thr
1				5					10					15	
Ser	Ile	Pro	Ala	Leu	Ser	Ser	Arg	Ser	Cys	Arg	Glu	Ser	Pro	Lys	Gly
			20					25					30		
Arg	Trp	Trp	Gly	Trp	Gly	Leu	Gln	Gln	Leu	Gly	Pro	Leu	Ile	Ser	Leu
			35				40					45			
Lys	Ala	Gln	Gln	His	Thr	Val	Ser	Gln	Val	Cys	Gln	Val	Pro	Gln	His
			50			55				60					
Gly	His	Pro	Ala	Leu	Thr	Ala	Pro	Pro	Arg	Leu	Pro	Ala	Cys	His	His
65				70					75					80	
Leu	His	Lys	His	Met	Leu	Gln	Leu	His	Thr	Arg	Glu	Thr	Pro	His	Ala
				85					90					95	

Arg Phe

<210> 2363

<211> 833

<212> DNA

<213> Homo sapiens

<400> 2363

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 cagcacaagg ggaggtccca agaaccagaa cttacatcac tgctccgag ttcagaggtt  
 120  
 tcctttccca cttctcaga actttctgtt tccatggcct cctctgccac ctctgccacc  
 180  
 tcccctgatg tgctggcctc cgtttccatc gcttccatcat ggcttcttc cgcctgggtg  
 240  
 tccaagccca ctgcangtcg aagcaaacgt gattgcgtta ccaactcagaa ggtggcacag  
 300  
 ggactggcag cggtgccatc tgggagctctg tgtgctcagc ctccgagtgc aggttcccc  
 360

ggccccctgct gtggtgctag gtccccagat gagagatcac ggtcatgaag atcagcccc  
 420  
 aaggcagccc cttcenttcc agcctgggct ctggcgtgtt ctaggtgctc acttccatgg  
 480  
 ctggcctgct cacagagccc tacctcagcc tgtggttaagc gcacctgctc ggccttggtg  
 540  
 ctctatgatg agccaccagt cagttctgca gatgtgtccc cgagctcctg ccgagggacg  
 600  
 aaacacgggtg gccctgctcc tagtgccctgt gcacgccacg ctccacacct gccatctgcc  
 660  
 cttccaccac ctgctcccc aggggctccg cctcgtgact cagctcagg caagtctccg  
 720  
 ggcgcgaaca gctggctgat ggtgacatgc tgcagcctgg tcacatcaga aaccatgagg  
 780  
 gtggatctcc ggaggtcatc gatgtggaca gactgccaca gcccttcacg cgt  
 833

<210> 2364  
 <211> 135  
 <212> PRT  
 <213> Homo sapiens

<400> 2364  
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 Lys His His Gln Gln His Lys Gly Arg Ser Gln Glu Pro Glu Leu Thr  
 20 25 30  
 Ser Leu Pro Pro Ser Ser Glu Val Ser Phe Pro Thr Phe Ser Glu Leu  
 35 40 45  
 Ser Val Ser Met Ala Ser Ser Ala Thr Ser Ala Thr Ser Pro Asp Val  
 50 55 60  
 Leu Ala Ser Val Ser Ile Ala Ser Ser Trp Arg Ser Ser Ala Arg Cys  
 65 70 75 80  
 Ser Lys Pro Thr Ala Xaa Arg Ser Lys Arg Asp Cys Val Thr Thr Gln  
 85 90 95  
 Lys Val Ala Gln Gly Leu Ala Ala Val Pro Ser Gly Ser Leu Cys Ala  
 100 105 110  
 Gln Pro Pro Ser Ala Gly Phe Pro Gly Pro Cys Cys Gly Ala Arg Ser  
 115 120 125  
 Pro Asp Glu Arg Ser Arg Ser  
 130 135

<210> 2365  
 <211> 429  
 <212> DNA  
 <213> Homo sapiens

<400> 2365  
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 ctccgtcagt tcgccaaca acctctgaac gaagtcaaga ttctccggca ctggagccaa  
 120  
 ggtgcttgcc ctggcatgaa cgccccaggg gaggtcgacg ccgtcgggat tctcacaccg  
 180

atggtgatgg gactcgggtt ccaaccacgg ttccatgtga cccagacagt tctggttggc  
 240  
 cccgagctcg atgcctcgtc cgcgacacag accatcgagc cacctcatgt cctccgccgt  
 300  
 cacggggctg cggtcggccc acacctctc ctcaccgagg taggcaaata ccgcttcacc  
 360  
 atagagctca aggtgattga gaccacaccg cgccatgacg cgcgtcagga aatcaagagt  
 420  
 ggaacgcgt  
 429

<210> 2366

<211> 132

<212> PRT

<213> Homo sapiens

<400> 2366

Met	Ala	Arg	Cys	Gly	Leu	Asn	His	Leu	Glu	Leu	Tyr	Gly	Glu	Ala	Gly
1				5					10					15	
Phe	Ala	Tyr	Arg	Gly	Glu	Glu	Glu	Val	Trp	Ala	Asp	Arg	Ser	Pro	Val
			20					25					30		
Thr	Ala	Glu	Asp	Met	Arg	Trp	Leu	Asp	Gly	Leu	Cys	Arg	Gly	Arg	Gly
			35				40					45			
Ile	Glu	Leu	Gly	Ala	Asn	Gln	Asn	Cys	Leu	Gly	His	Met	Glu	Pro	Trp
			50			55					60				
Leu	Glu	Thr	Glu	Ser	His	His	Arg	Cys	Glu	Asn	Pro	Asp	Gly	Val	
65					70				75					80	
Asp	Leu	Pro	Trp	Gly	Val	His	Ala	Arg	Ala	Ser	Thr	Leu	Ala	Pro	Val
				85				90					95		
Pro	Glu	Asn	Leu	Asp	Phe	Val	Gln	Arg	Leu	Leu	Gly	Glu	Leu	Thr	Glu
			100				105						110		
Thr	Val	Ser	Ser	Lys	Phe	Leu	Asn	Val	Gly	Leu	Asp	Glu	Pro	Trp	Glu
			115				120						125		
Leu	Gly	Thr	Gly												
			130												

<210> 2367

<211> 474

<212> DNA

<213> Homo sapiens

<400> 2367

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 ggggggtcacg agctcaccga cgcgcgcgcg ttcgcctcgt ggggcgtcga tttcgtcaaa  
 120  
 tacgatcggt gctccgggtg ctccgcgcac gacgaccagg tcgcctcgtt caccgcgatg  
 180  
 cgtgacgcaa tccgatccac cggacgcccc atggtgtaca gcatcaaccc caacagcgaa  
 240  
 tcgccggatc ggtccggagc ccaattcgat tggggcggtg tggcaaccat gacacgtacc  
 300  
 accaacgaca tctcgccggt gtggaccact cggccggcgg gtgccgatgc gacaccggca  
 360

tcgggggtatc aggggatccg cgacatcatc gacgccgtgg ccccgatcgg cgcacggggt  
 420  
 gccgacggcag cttcgtcgac atggacatgc tcgtcgtcgg tgctggcaac gcgt  
 474

<210> 2368  
 <211> 158  
 <212> PRT  
 <213> Homo sapiens

<400> 2368  
 Xaa Ala Arg Glu Lys Thr Cys Ala Gln Phe Gly Gly Thr Tyr Pro Gly  
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 Ser Ala Gly Ser Gly Gly His Glu Leu Thr Asp Ala Arg Ala Phe Ala  
 20 25 30  
 Ser Trp Gly Val Asp Phe Val Lys Tyr Asp Arg Cys Ser Gly Asp Ser  
 35 40 45  
 Ala His Asp Asp Gln Val Ala Ser Phe Thr Ala Met Arg Asp Ala Ile  
 50 55 60  
 Arg Ser Thr Gly Arg Pro Met Val Tyr Ser Ile Asn Pro Asn Ser Glu  
 65 70 75 80  
 Ser Pro Asp Arg Ser Gly Ala Gln Phe Asp Trp Gly Gly Val Ala Thr  
 85 90 95  
 Met Thr Arg Thr Thr Asn Asp Ile Ser Pro Val Trp Thr Thr Arg Pro  
 100 105 110  
 Ala Gly Ala Asp Ala Thr Pro Ala Ser Gly Tyr Gln Gly Ile Arg Asp  
 115 120 125  
 Ile Ile Asp Ala Val Ala Pro Ile Gly Ala Arg Val Ala Thr Ala Ala  
 130 135 140  
 Ser Ser Thr Trp Thr Cys Ser Ser Ser Val Ser Ala Thr Arg  
 145 150 155

<210> 2369  
 <211> 408  
 <212> DNA  
 <213> Homo sapiens

<400> 2369  
 ctgaatggca ggcaggcaga ggccaccaga gccagcccc cgagaagccc tgctgagcca  
 60  
 aaggggagcg ccctgggacc taacccagag ccccatctca cttcccccg ttctttcaaa  
 120  
 gtgcctcccc caaccccgagt caggacttcg tccatcccag ttcaggaagc acaagaggct  
 180  
 cccgaaagga agagggggcc accaagaagg ctcccagccg actcccactg cctcccagct  
 240  
 tccacatccg ccccgctccc caggtctacc cagacagggc ccccgagcnc agactgcect  
 300  
 ggggagctca aggccacagc accagccagc ccaaggcttg gccagtccca gtcccaagca  
 360  
 gatgaacgag ctgggactcc gcctccagcc cctcccctgc cccctect  
 408

<210> 2370

&lt;211&gt; 136

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2370

```

Leu Asn Gly Arg Gln Ala Glu Ala Thr Arg Ala Ser Pro Pro Arg Ser
 1           5           10           15
Pro Ala Glu Pro Lys Gly Ser Ala Leu Gly Pro Asn Pro Glu Pro His
      20           25           30
Leu Thr Phe Pro Arg Ser Phe Lys Val Pro Pro Pro Thr Pro Val Arg
 35           40           45
Thr Ser Ser Ile Pro Val Gln Glu Ala Gln Glu Ala Pro Glu Arg Lys
 50           55           60
Arg Gly Pro Pro Arg Arg Leu Pro Ala Asp Ser His Cys Leu Pro Ala
65           70           75           80
Ser Thr Ser Ala Pro Pro Pro Arg Ser Thr Gln Thr Gly Pro Pro Ser
      85           90           95
Xaa Asp Cys Pro Gly Glu Leu Lys Ala Thr Ala Pro Ala Ser Pro Arg
      100           105           110
Leu Gly Gln Ser Gln Ser Gln Ala Asp Glu Arg Ala Gly Thr Pro Pro
      115           120           125
Pro Ala Pro Pro Leu Pro Pro Pro
      130           135

```

&lt;210&gt; 2371

&lt;211&gt; 327

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2371

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gaattcgggtg tgcgatgcga gcctgcagcc tgggagcaga gacaaggagc aaaggcgggtg
60
agaggggttgc cagggcacc cagttacagct ggagctgcag gggacccatc cctcgagaga
120
ggcaggcact agtcatgagg caagagatgc ctcagaagag gatgctggcc gcagggcaca
180
gcagagaggg agatagcccc gggcactcct caggaccggg cctcagggga cagcaaacaa
240
gattcctgat agacgcgccc aggtcatgcc ttttcagtgg tgtgagccag gttctggcgt
300
caggcggggc aaggttttca tgcagcn
327

```

&lt;210&gt; 2372

&lt;211&gt; 104

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2372

```

Met Arg Ala Cys Ser Leu Gly Ala Glu Thr Arg Ser Lys Gly Gly Glu
 1           5           10           15
Arg Val Ala Arg Ala Pro Ser Tyr Ser Trp Ser Cys Arg Gly Pro Ile
      20           25           30
Pro Arg Glu Arg Gln Ala Leu Val Met Arg Gln Glu Met Pro Gln Lys

```

```

      35          40          45
Arg Met Leu Ala Ala Gly His Ser Arg Glu Gly Asp Ser Pro Gly His
      50          55          60
Ser Ser Gly Pro Gly Leu Arg Gly Gln Gln Thr Arg Phe Leu Ile Asp
      65          70          75          80
Ala Pro Arg Ser Cys Leu Phe Ser Gly Val Ser Gln Val Leu Ala Ser
      85          90          95
Gly Gly Pro Arg Phe Ser Cys Ser
      100

```

&lt;210&gt; 2373

&lt;211&gt; 591

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2373

```

gaattctgac attcaggaag tcaattgcag aagggtttaac caagttgatt ctgttttacc
60
aaatcctgtc tattctgaaa agcggccaat gccagactca tctcatgatg tgaaagttct
120
cacttcaaag acatcagctg ttgagatgac ccaggcagta ttgaatactc agcttttcac
180
agaaaatggt accaaagtgt agcaaaattc accagcagtt tgtgaaacaa tttctgttcc
240
caagtccatg tccactgagg aatataaatc aaaaattcaa aatgaaaata tgctacttct
300
cgctttgctt tcacaggcac gtaagactca gaagacagta ttaaaagatg ctaatcaaac
360
tattcaggat tctaaaccag acagttgtga aatgaatcca aatacccaaa tgactggtaa
420
ccaactgaat ttgaagaaca tggaaactcc aagtacttct aatgtaagtg gcagggtttt
480
ggacaactcc ttttgcagtg gacaagaatc ctcaacaaaa ggaatgcctg ctaaaagtga
540
cagtagctgt tccatggaag tgctagcaac ctgtctttcc ctgtggaaaa a
591

```

&lt;210&gt; 2374

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2374

```

Met Pro Asp Ser Ser His Asp Val Lys Val Leu Thr Ser Lys Thr Ser
  1          5          10          15
Ala Val Glu Met Thr Gln Ala Val Leu Asn Thr Gln Leu Ser Ser Glu
      20          25          30
Asn Val Thr Lys Val Glu Gln Asn Ser Pro Ala Val Cys Glu Thr Ile
      35          40          45
Ser Val Pro Lys Ser Met Ser Thr Glu Glu Tyr Lys Ser Lys Ile Gln
      50          55          60
Asn Glu Asn Met Leu Leu Leu Ala Leu Leu Ser Gln Ala Arg Lys Thr
      65          70          75          80
Gln Lys Thr Val Leu Lys Asp Ala Asn Gln Thr Ile Gln Asp Ser Lys

```

Xaa	Ala	Met	Ser	Leu	Leu	Ser	Ser	Gly	Thr	Leu	Asp	Ser	Tyr	Leu	Glu
1				5					10					15	
Arg	His	Lys	Gln	Leu	Asp	Ala	Met	Arg	Met	Leu	His	Phe	Phe	Ala	Leu
			20					25					30		
Asp	Glu	Glu	Asn	Pro	Ala	Ser	Ile	Tyr	Asn	Cys	Leu	Arg	Ala	Ala	Arg
			35				40					45			
Gly	Asn	Ala	His	Ala	Val	Arg	Gly	Arg	Ile	Thr	Ala	Asp	Met	Trp	Glu
	50					55					60				
Asn	Leu	Asn	Ala	Thr	Trp	Leu	Glu	Met	Arg	Ser	Ile	Ala	Ala	Gly	Gly
65				70					75					80	
Leu	Ala	Arg	His	Gly	Ile	Ser	His	Phe	Cys	Asp	Trp	Val	Lys	Gln	Arg



	85		90		95										
Ser	His	Leu	Phe	Arg	Gly	Ala	Thr	Ser	Gly	Thr	Ile	Met	Arg	Asn	Asp
	100							105						110	
Ala	Tyr	Arg	Phe	Ile	Arg	Leu	Gly	Thr	Phe	Val	Glu	Arg	Ala	Asp	Asn
	115						120					125			
Thr	Leu	Arg	Leu	Leu	Asp	Ala	Arg	Tyr	Glu	Met	Phe	Gly	Glu	Glu	Ser
	130					135					140				
Glu	Glu	Val	Ser	Asp	Leu	Ser	Ala	Arg	Gly	Tyr	Tyr	Gln	Trp	Ser	Ala
145					150					155				160	
Leu	Leu	Arg	Ala	Leu	Ser	Ser	Phe	Glu	Ala	Tyr	Thr	Glu	Leu	Tyr	Pro
		165						170						175	
Asn	Ala														

<210> 2377  
 <211> 622  
 <212> DNA  
 <213> Homo sapiens

<400> 2377  
 acgcgtgaag gggtgaggct tcagaagtgg tagggaagaa cagaagctcc cttctgaggg  
 60  
 agcaccagg agatgaaagg aaccaatcct gggtgggcct gcaccaggct tatcaacccc  
 120  
 tgacagacaa atggaaaact tctgtgatgg tgggacatga aaaaatattt cacccttctg  
 180  
 ataaaatgga accagcagat agaagtagga atttttctgt taggtgaaat gtttttaaaa  
 240  
 atatgtatac aggaaaaagc ataaaacagt attgactggc aaacatagaa ctggaatgta  
 300  
 aatataatgt tctttgccct gaatgattta agtggcatga taaaactcat gccacagact  
 360  
 gggtaagaca aggaatctaa tccactctaa aaagaagaaa agcatagtaa aattctcctt  
 420  
 agagttagaa ttattaatag ttcttatcta ctatttaatt taatcatagt taatgatgag  
 480  
 aattttctta atttaaagct tctgatgatg ctaaagtgtc atttctcatg attccttaaa  
 540  
 acaatttttg taaattctat tcctaggacc ttctgctttc agaaaaatta atgtcttgta  
 600  
 ttcttcgtat tggaggagat ct  
 622

<210> 2378  
 <211> 109  
 <212> PRT  
 <213> Homo sapiens

<400> 2378  
 Met Ser Phe Ile Met Pro Leu Lys Ser Phe Arg Ala Lys Asn Ile Ile  
 1 5 10 15  
 Phe Thr Phe Gln Phe Tyr Val Cys Gln Ser Ile Leu Phe Tyr Ala Phe  
 20 25 30  
 Ser Cys Ile His Ile Phe Lys Asn Ile Ser Pro Asn Arg Lys Ile Pro

```

          35          40          45
Thr Ser Ile Cys Trp Phe His Phe Ile Arg Arg Val Lys Tyr Phe Phe
  50          55          60
Met Ser His His His Arg Ser Phe Pro Phe Val Cys Gln Gly Leu Ile
65          70          75          80
Ser Leu Val Gln Asp His Pro Gly Leu Val Pro Phe Ile Ser Trp Val
          85          90          95
Leu Pro Gln Lys Gly Ala Ser Val Leu Pro Tyr His Phe
          100          105

```

<210> 2379  
 <211> 342  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2379
tcatgacctg gagacttcgg aaactcaaca agactgcagg gcacccaggg gcaccagccc
60
cggtcaccgc agaggatcag tgcactttgc catctggcag atcaactcat ggcacaactg
120
ggaaacataa cattcacgct tgtgaaccga gacgccatac cccagcgggtg ccgagagcaa
180
cagtgtgtgtg caggctctggg cagatgaggg cctccaggac acgaggactc actcgctcac
240
cctgcccact gggcagctgc tcgccactcc cctcctggag ggcaggacgg acaccacaca
300
cacacacaag caggggaagct gtgcagcagt ggggagaaag ca
342

```

<210> 2380  
 <211> 113  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2380
Met Thr Trp Arg Leu Arg Lys Leu Asn Lys Thr Ala Gly His Pro Gly
  1          5          10          15
Ala Pro Ala Pro Val Thr Ala Glu Asp Gln Cys Thr Leu Pro Ser Gly
          20          25          30
Arg Ser Thr His Gly Thr Thr Gly Lys His Asn Ile His Ala Cys Glu
          35          40          45
Pro Arg Arg His Thr Pro Ala Val Pro Arg Ala Thr Val Leu Cys Arg
          50          55          60
Ser Gly Gln Met Arg Ala Ser Arg Thr Arg Gly Leu Thr Arg Ser Pro
65          70          75          80
Cys Pro Leu Gly Ser Cys Ser Pro Leu Pro Ser Trp Arg Ala Gly Arg
          85          90          95
Thr Pro His Thr His Thr Ser Arg Glu Ala Val Gln Gln Trp Gly Glu
          100          105          110
Ser

```

<210> 2381  
 <211> 434

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2381

gtgcaccctg gccatatgga cgccagcgac gtcggcgctct tgcgtgacgt ggaaccgatc  
 60  
 ggcccaagta gagagatgga ttttgaatgg tgacgatgta cccgccgcag caagtggatg  
 120  
 ccgtcctctt tgacatggac ggaaccctgc tcaacaccct gccggcctgg tgcgtggcat  
 180  
 ctgagcatct gtggggcact tctctggctg acgctgacag cgccaagggt gacgggggca  
 240  
 ccgtcgacga cgtcgttgag ctgtatctgc gagaccaccc tcaggcagat cccagggcca  
 300  
 ccatcgagcg ttcatggac atccttgacg ccaacctggc tggccacacc gagccgatgc  
 360  
 ccggagctga ccgcctcgtg aagaggctgt caggtcatgt acccatcgct gtggtgtcga  
 420  
 attccccgac gcgt  
 434

&lt;210&gt; 2382

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2382

Met Val Thr Met Tyr Pro Pro Gln Gln Val Asp Ala Val Leu Phe Asp  
 1 5 10 15  
 Met Asp Gly Thr Leu Leu Asn Thr Leu Pro Ala Trp Cys Val Ala Ser  
 20 25 30  
 Glu His Leu Trp Gly Thr Ser Leu Ala Asp Ala Asp Ser Ala Lys Val  
 35 40 45  
 Asp Gly Gly Thr Val Asp Asp Val Val Glu Leu Tyr Leu Arg Asp His  
 50 55 60  
 Pro Gln Ala Asp Pro Gln Ala Thr Ile Glu Arg Phe Met Asp Ile Leu  
 65 70 75 80  
 Asp Ala Asn Leu Ala Gly His Thr Glu Pro Met Pro Gly Ala Asp Arg  
 85 90 95  
 Leu Val Lys Arg Leu Ser Gly His Val Pro Ile Ala Val Val Ser Asn  
 100 105 110  
 Ser Pro Thr Arg  
 115

&lt;210&gt; 2383

&lt;211&gt; 393

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2383

acgcgtgcgt tcagatgagc gccggacgaa actcctcggt cgcttcggca ggcattggatt  
 60  
 catgtcggca cgggcctttg aacaggatcg ccgtcgcgtg gctatccgcc gcgggtgggg  
 120

cagaaaaacgc ccactctccc ttccccaggc gccggccgctc gagtcgtcta cgcaacgcac  
 180  
 gtctacatag gtgacttttt cataccccca ctttcgtact cggatgggct cggcgtgctc  
 240  
 gatgtcggca cgaaaaaatta aatgcactga atgcgggttg tcgcacagga tgcattctgt  
 300  
 cttttctgat gccacccacc ttgttacata ttctgccatg caaaacacct tgtgattttt  
 360  
 ggccggagtgc aacatgggtat gtgtatgccca ctg  
 393

<210> 2384  
 <211> 125  
 <212> PRT  
 <213> Homo sapiens

<400> 2384  
 Met Leu His Ser Ala Lys Asn His Lys Val Phe Cys Met Ala Glu Tyr  
 1 5 10 15  
 Val Thr Arg Trp Val Ala Ser Arg Lys Thr Arg Cys Ile Leu Cys Asp  
 20 25 30  
 Asn Pro His Ser Val His Leu Ile Phe Arg Ala Asp Ile Glu His Ala  
 35 40 45  
 Glu Pro Ile Arg Val Arg Lys Trp Gly Tyr Glu Lys Val Thr Tyr Val  
 50 55 60  
 Asp Val Arg Cys Val Asp Asp Ser Thr Ala Gly Ala Trp Gly Arg Glu  
 65 70 75 80  
 Ser Gly Arg Phe Leu Pro His Pro Arg Arg Ile Ala Thr Arg Arg Arg  
 85 90 95  
 Ser Cys Ser Lys Ala Arg Ala Asp Met Asn Pro Cys Leu Pro Lys Arg  
 100 105 110  
 Pro Arg Ser Phe Val Arg Arg Ser Ser Glu Arg Thr Arg  
 115 120 125

<210> 2385  
 <211> 347  
 <212> DNA  
 <213> Homo sapiens

<400> 2385  
 acgcgttccc aaagtaggat ggctgggata gagggaaagg acatctttca ggcttggtat  
 60  
 gcactgtgct gtggactctt gttgtggggt cctaggtctg ccagcatttt tggggttcac  
 120  
 cccgtgaccc tctacggggt tccatgcccc cagcaccacg tccatcatca tttctggggt  
 180  
 cccctcacct cagagagcct gcttctctatg actgcgtggg ccagctggag aaggacgacc  
 240  
 caagaccctt caagtttctg tgtcctgacc ccaagcatag gcctgagtgc tcctggggcc  
 300  
 caagggcctt tacgcactac tctctggggc ccactgtctg cactctt  
 347

<210> 2386

<211> 109  
 <212> PRT  
 <213> Homo sapiens

<400> 2386  
 Met Ala Gly Ile Glu Gly Lys Asp Ile Phe Gln Ala Cys Tyr Ala Leu  
 1 5 10 15  
 Cys Cys Gly Leu Leu Leu Trp Gly Pro Arg Ser Ala Gln His Phe Gly  
 20 25 30  
 Val His Pro Val Thr Leu Tyr Gly Phe Pro Cys Pro Gln His His Val  
 35 40 45  
 His His His Phe Trp Gly Pro Leu Thr Ser Glu Ser Leu Leu Pro Met  
 50 55 60  
 Thr Ala Trp Ala Ser Trp Arg Arg Thr Thr Gln Asp Pro Ser Ser Phe  
 65 70 75 80  
 Cys Val Leu Thr Pro Ser Ile Gly Leu Ser Ala Pro Gly Ala Gln Gly  
 85 90 95  
 Pro Leu Arg Thr Thr Leu Trp Gly Pro Leu Ser Ala Leu  
 100 105

<210> 2387  
 <211> 715  
 <212> DNA  
 <213> Homo sapiens

<400> 2387  
 ncggccgcac ttcaccttac ggaggggaga taatgagatc aattagaggc gccgtcaccg  
 60  
 cgccggagac agctgccgcc gcatagtaat caccgcggg ctgggtgcgc gggggctccc  
 120  
 cgctacctgc gcgcctgctg ctcccaccac gcggcaccga cccgggcgcg ccccgggccc  
 180  
 ctgtccgcag cccacagcca caccgcgcac cctacaccct ccttgcgcct ctgctgggga  
 240  
 gctcaccccc tccactcgca cagtgcgctg cgcccgggg tgtgggaggt cccgggactt  
 300  
 gggttgtgag tgcctgtgtg ggggtagggg caggtgtccg cttgtgcgca tatgggcatg  
 360  
 agtgtacatg gcgtgtgcct ggagatgggc gagtgcaggc tggaatgtgc cggcgtggca  
 420  
 cgtgtgtggg cccaaataga tgcgtgtgtg atcacatgtt gtgttcgtgt ttgcacctcg  
 480  
 tgtgcctgtg tgtccgtatt tgagtgcctta caggaatgtg ggtgggtgagt acccgatatg  
 540  
 ggggtgcatt gcacctgtgc gtgtgtgtgt gtaggcgcgt gtgtgtgcgt gtgtgtgtta  
 600  
 ngggatacgt gtagatgtgc attagtgtga ctgtgtgtgc tcatgtgcct gtgcacgtgt  
 660  
 gtttgagggt tgtgtgcatg ggtagcgtct gtgagagcca tgtgtatatc tgcag  
 715

<210> 2388  
 <211> 58  
 <212> PRT

<213> Homo sapiens

<400> 2388

```
Met Gly Met Ser Val His Gly Val Cys Leu Glu Met Gly Glu Cys Arg
 1             5             10             15
Leu Glu Cys Ala Gly Val Ala Arg Val Trp Ala Gln Ile Asp Ala Cys
      20             25             30
Val Ile Thr Cys Cys Val Arg Val Cys Thr Ser Cys Ala Cys Val Ser
      35             40             45
Val Phe Glu Cys Leu Gln Glu Cys Gly Trp
      50             55
```

<210> 2389

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2389

```
ntcaccctgc cgccggaagg ttgctcgtac cgcattggcca tcgtcaccat gaagaagtcg
60
tattccgggccc acgccaagcg cgtcatgttg ggtgtctggt cgtttttgcg acagttcatg
120
tataccaagt tcgttatcgt caccgacgac gatatacaacg cccgcgactg gaacgacgtg
180
atctggggcca tcaccacgcg catggacccc aagcgcgaca cggtgatgat cgataaacacg
240
ccgatcgact acctcgactt cgcctcgccg gtgtccggcc tgggttcgaa gatgggggctc
300
gatccccacgc acaaatggcc cggccacacc acccgn
336
```

<210> 2390

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2390

```
Xaa Thr Leu Pro Pro Glu Gly Cys Ser Tyr Arg Met Ala Ile Val Thr
 1             5             10             15
Met Lys Lys Ser Tyr Pro Gly His Ala Lys Arg Val Met Leu Gly Val
      20             25             30
Trp Ser Phe Leu Arg Gln Phe Met Tyr Thr Lys Phe Val Ile Val Thr
      35             40             45
Asp Asp Asp Ile Asn Ala Arg Asp Trp Asn Asp Val Ile Trp Ala Ile
      50             55             60
Thr Thr Arg Met Asp Pro Lys Arg Asp Thr Val Met Ile Asp Asn Thr
      65             70             75             80
Pro Ile Asp Tyr Leu Asp Phe Ala Ser Pro Val Ser Gly Leu Gly Ser
      85             90             95
Lys Met Gly Leu Asp Pro Thr His Lys Trp Pro Gly His Thr Thr Arg
      100             105             110
```

<210> 2391

<211> 388

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2391

gtcgactaac ctgctacag cgcgccacct acgtttagtc gcgaagcgtg tcgggtccat  
 60  
 gttcattccg gagctacacc atgaataaag tactacctga tccacccatc gatccccgaa  
 120  
 aagaccgcgt cgctttcaac cgcgccatcg accattacct gcctaccag ggettcact  
 180  
 gcgtcaacga agacctgagt ttcgaagacg ccctgctcta caccgccagc ctgctcgaca  
 240  
 gtgcctctgc caccgctg gattgcggtg agctgctgca aagccctgaa cgggcgaaga  
 300  
 tcctggccgt gtggcatttg ctggaaattg caaaaaccac cgtagatcgc ttccccatcg  
 360  
 agtgcctgac cgcaccaaag ccctgcct  
 388

&lt;210&gt; 2392

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2392

Met Asn Lys Val Leu Pro Asp Pro Pro Ile Asp Pro Ala Lys Asp Arg  
 1 5 10 15  
 Val Ala Phe Asn Arg Ala Ile Asp His Tyr Leu Pro Thr Gln Gly Phe  
 20 25 30  
 His Cys Val Asn Glu Asp Leu Ser Phe Glu Asp Ala Leu Leu Tyr Thr  
 35 40 45  
 Ala Ser Leu Leu Asp Ser Ala Ser Ala Thr Ala Leu Asp Cys Gly Glu  
 50 55 60  
 Leu Leu Gln Ser Pro Glu Arg Ala Lys Ile Leu Ala Val Trp His Leu  
 65 70 75 80  
 Leu Glu Ile Ala Lys Thr Thr Val Asp Arg Phe Pro Ile Glu Cys Leu  
 85 90 95  
 Thr Ala Pro Lys Pro Cys  
 100

&lt;210&gt; 2393

&lt;211&gt; 411

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2393

aacctgtcta ccgaggacca ggccgagcag gtagagattg tgaagcgtc tgagtccggc  
 60  
 atgggtaccg accccatcac tgccgccccg gatatgacca tcggggaagt agacgcgctg  
 120  
 tgcgcccgt tccgcatttc cgccctgccg gtggtagacg aggacggcac cctgatgggc  
 180  
 attgcacca cccgcgatat gcgcttcgag cctgactttg accgcaaggt cagcgaggtc  
 240

atgacggcta tgccgcttgt tgttgcgcg gaggggtgtat ctaagaagga agccctcgaa  
 300  
 ctgctctcgg ccaataaggt ggaaaagctg cccatcgctg atgctggataa taagctcacc  
 360  
 ggccctgatta ccgtcaagga ctttgtcaag accgagcagt accccaacgc g  
 411

<210> 2394  
 <211> 137  
 <212> PRT  
 <213> Homo sapiens

<400> 2394  
 Asn Leu Ser Thr Glu Asp Gln Ala Glu Gln Val Glu Ile Val Lys Arg  
 1 5 10 15  
 Ser Glu Ser Gly Met Val Thr Asp Pro Ile Thr Ala Arg Pro Asp Met  
 20 25 30  
 Thr Ile Gly Glu Val Asp Ala Leu Cys Ala Arg Phe Arg Ile Ser Gly  
 35 40 45  
 Leu Pro Val Val Asp Glu Asp Gly Thr Leu Met Gly Ile Cys Thr Thr  
 50 55 60  
 Arg Asp Met Arg Phe Glu Pro Asp Phe Asp Arg Lys Val Ser Glu Val  
 65 70 75 80  
 Met Thr Ala Met Pro Leu Val Val Ala Arg Glu Gly Val Ser Lys Lys  
 85 90 95  
 Glu Ala Leu Glu Leu Ser Ala Asn Lys Val Glu Lys Leu Pro Ile  
 100 105 110  
 Val Asp Ala Asp Asn Lys Leu Thr Gly Leu Ile Thr Val Lys Asp Phe  
 115 120 125  
 Val Lys Thr Glu Gln Tyr Pro Asn Ala  
 130 135

<210> 2395  
 <211> 362  
 <212> DNA  
 <213> Homo sapiens

<400> 2395  
 aagctttcag aggagtttgc taaagtgtta aggatttgca tattttcaac tttagtcata  
 60  
 tctaagtgcc ccaataaaac agcgcggcgc attgggggct ggctttcatc aacaactaac  
 120  
 ttagcaatat taatctgacc ttttctgggt gattgggcat ttagtaataa tgcggggcca  
 180  
 atatcatcat actttccaaa ttttttgat ttttagaca tcaactgaag ttgtgaccat  
 240  
 ttactgtctt tgtcttgatg gcaatctaaa caaacatctc ttgtattaag ttgttcactt  
 300  
 acccaaggat taggcactct aaaggcatga tcgcgtcgat catcgactcc catgtaacgc  
 360  
 gt  
 362

<210> 2396



<211> 117  
 <212> PRT  
 <213> Homo sapiens

<400> 2396  
 Met Gly Val Asp Asp Arg Arg Asp His Ala Phe Arg Val Pro Asn Pro  
 1 5 10 15  
 Trp Val Ser Glu Gln Leu Asn Thr Arg Asp Val Cys Leu Asp Cys His  
 20 25 30  
 Gln Asp Lys Asp Ser Lys Trp Ser Gln Leu Gln Leu Met Ser Lys Lys  
 35 40 45  
 Ser Lys Ile Phe Gly Lys Tyr Asp Asp Ile Gly Pro Ala Leu Leu Leu  
 50 55 60  
 Asn Ala Gln Ser Pro Gly Lys Gly Gln Ile Asn Ile Ala Lys Leu Val  
 65 70 75 80  
 Val Asp Glu Ser Gln Pro Pro Met Arg Arg Ala Val Leu Leu Gly His  
 85 90 95  
 Leu Asp Met Thr Lys Val Glu Asn Met Gln Ile Leu Asn Thr Leu Ala  
 100 105 110  
 Asn Ser Ser Glu Ser  
 115

<210> 2397  
 <211> 449  
 <212> DNA  
 <213> Homo sapiens

<400> 2397  
 nacagcacac tccgcctcct ccgacgatca tagctttcac gtcggacatg atcccccgcc  
 60  
 tagtgtacta ctggtccttc tccgtccctc cctacgggga ccacacttcc tacaccatgg  
 120  
 aagggtacat caacaacact ctctccatct tcaaagtcgc agacttcaaa aacaaaagca  
 180  
 agggaaaccc gtactctgac ctgggtaacc ataccacatg caggtatcgt gatttccgat  
 240  
 acccacctgg acacccccag gagtataaac acaacatcta ctattggcat gtgattgcag  
 300  
 ccaagctggc ttttatcatt gtcattggagc acgtcatcta ctctgtgaaa tttttcattt  
 360  
 catatgcaat tcccgatgta tcaaagcgca caaagagcaa gatccagaga gaaaaatacc  
 420  
 taacccaaaa gcttcttcat gagaatcac  
 449

<210> 2398  
 <211> 76  
 <212> PRT  
 <213> Homo sapiens

<400> 2398  
 Cys Thr Thr Gly Pro Ser Pro Ser Leu Pro Thr Gly Thr Thr Leu Pro  
 1 5 10 15  
 Thr Pro Trp Lys Gly Thr Ser Thr Thr Leu Ser Pro Ser Ser Lys Ser

20 25 30  
 Gln Thr Ser Lys Thr Lys Ala Arg Glu Thr Arg Thr Leu Thr Trp Val  
 35 40 45  
 Thr Ile Pro His Ala Gly Ile Val Ile Ser Asp Thr His Leu Asp Thr  
 50 55 60  
 Pro Arg Ser Ile Asn Thr Thr Ser Thr Ile Gly Met  
 65 70 75

<210> 2399  
 <211> 344  
 <212> DNA  
 <213> Homo sapiens

<400> 2399  
 acgcgtcatg cttcacgaaa cgggtcacgc gcttcattac caagcagctg gcaaacacaa  
 60  
 cttgtatttc gagcgggttg cgccagtcga gatcatggag ttcgtggcct actgcttgca  
 120  
 gtttctgacg atcgagcgcc tggccatgtc aggggaactt tctgggtaaag aacaggaact  
 180  
 agtcaaaccc tttgctggtc cggccaggct tggaggggtt cgaaaaccta caacgccaca  
 240  
 aaacgggtcc agcactgggt ttataaacag cctaaaatcc cgacaagtaa agaactcgat  
 300  
 accgtatggc ttgagatgcg acacacgctc ggggtggatt ggtc  
 344

<210> 2400  
 <211> 112  
 <212> PRT  
 <213> Homo sapiens

<400> 2400  
 Met Leu His Glu Thr Gly His Ala Leu His Tyr Gln Ala Ala Gly Lys  
 1 5 10 15  
 His Asn Leu Tyr Phe Glu Arg Val Ala Pro Val Glu Ile Met Glu Phe  
 20 25 30  
 Val Ala Tyr Cys Leu Gln Phe Leu Thr Ile Glu Arg Leu Ala Met Ser  
 35 40 45  
 Gly Glu Leu Ser Gly Lys Glu Gln Glu Leu Val Lys Pro Phe Ala Gly  
 50 55 60  
 Pro Ala Arg Leu Gly Gly Val Arg Lys Pro Thr Thr Pro Gln Asn Gly  
 65 70 75 80  
 Ser Ser Thr Gly Phe Ile Asn Ser Leu Lys Ser Arg Gln Val Lys Asn  
 85 90 95  
 Ser Ile Pro Tyr Gly Leu Arg Cys Asp Thr Arg Ser Gly Trp Ile Gly  
 100 105 110

<210> 2401  
 <211> 479  
 <212> DNA  
 <213> Homo sapiens

<400> 2401

nntaccgagg taaaactcga tagcctcggg gtcaccgacc agatgcgctc tgggcgctgc  
 60  
 tggatgtttg ccgcgctcaa cgtattccgc caccgcgcgg ccaaggagct caacatcgat  
 120  
 gactttgagt tttcctttac ctacctgcag tacttcgaca aactagagcg cgccaacttc  
 180  
 gcgctcaacc aactgctgga tctcaccgaa gacggcaccg actgggatga ccgcgacgtg  
 240  
 gctacttccc tcgagctcac aggcgacgac ggcggctggg ggtcatTTTT caccaacctc  
 300  
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 360  
 accgaccaga tgaatcgca tatcgccacc atcatccgcc gcgccgcgca ccgtgcgggtg  
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<210> 2402

<211> 159

<212> PRT

<213> Homo sapiens

<400> 2402

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Ser	Gly	Arg	Cys	Trp	Met	Phe	Ala	Ala	Leu	Asn	Val	Phe	Arg	His	Arg
			20					25					30		
Ala	Ala	Lys	Glu	Leu	Asn	Ile	Asp	Asp	Phe	Glu	Phe	Ser	Phe	Thr	Tyr
		35				40					45				
Leu	Gln	Tyr	Phe	Asp	Lys	Leu	Glu	Arg	Ala	Asn	Phe	Ala	Leu	Asn	Gln
	50				55					60					
Leu	Leu	Asp	Leu	Thr	Glu	Asp	Gly	Thr	Asp	Trp	Asp	Asp	Arg	Asp	Val
65					70				75					80	
Ala	Thr	Ser	Leu	Glu	Leu	Thr	Gly	Asp	Asp	Gly	Gly	Trp	Trp	Ser	Phe
			85					90						95	
Phe	Thr	Asn	Leu	Val	Asp	Lys	Tyr	Gly	Ala	Val	Pro	Ala	Glu	Val	Met
		100						105					110		
Pro	Glu	Val	His	Ser	Ser	Gly	His	Thr	Asp	Gln	Met	Asn	Arg	Asp	Ile
	115					120					125				
Ala	Thr	Ile	Ile	Arg	Arg	Ala	Ala	His	Arg	Ala	Val	Glu	Gly	Glu	Gly
	130					135					140				
Asp	Arg	Gly	Gly	Ile	Val	Lys	Gln	Ala	Arg	Pro	Asp	Ile	Gln	Arg	
145					150						155				

<210> 2403

<211> 387

<212> DNA

<213> Homo sapiens

<400> 2403

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 120

ttctctcaagc gcctggaccc gaagaagtac accgacgaaa ccttcggtgt gccgaccatc  
 180  
 accgacatcc tgcaagagct ggaaaaacct ggccgcgacc cgcgctcccg gttcaagacc  
 240  
 gccgagttcc aggacggtgt tgaagacctc aaggacctgc agccgggcat gatcctcgaa  
 300  
 ggcggtggtca ccaacgtgac caactttggc gcctttgtgg atatcggcgt gcacaggac  
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 387

<210> 2404

<211> 129

<212> PRT

<213> Homo sapiens

<400> 2404

Xaa	Met	Asn	Gly	Asp	Asn	Pro	Leu	Asp	Ser	Ser	Ala	Val	His	Pro	Glu
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Ala	Tyr	Pro	Leu	Val	Gln	Arg	Ile	Ala	Ala	Glu	Thr	Gly	Arg	Asp	Ile
			20					25					30		
Arg	Ser	Leu	Ile	Gly	Asp	Ala	Ala	Phe	Leu	Lys	Arg	Leu	Asp	Pro	Lys
		35					40					45			
Lys	Tyr	Thr	Asp	Glu	Thr	Phe	Gly	Val	Pro	Thr	Ile	Thr	Asp	Ile	Leu
		50				55					60				
Gln	Glu	Leu	Glu	Lys	Pro	Gly	Arg	Asp	Pro	Arg	Pro	Glu	Phe	Lys	Thr
65				70					75					80	
Ala	Glu	Phe	Gln	Asp	Gly	Val	Glu	Asp	Leu	Lys	Asp	Leu	Gln	Pro	Gly
			85					90					95		
Met	Ile	Leu	Glu	Gly	Val	Val	Thr	Asn	Val	Thr	Asn	Phe	Gly	Ala	Phe
		100						105				110			
Val	Asp	Ile	Gly	Val	His	Gln	Asp	Gly	Leu	Val	His	Ile	Ser	Ala	Leu
		115					120					125			

Ser

<210> 2405

<211> 859

<212> DNA

<213> Homo sapiens

<400> 2405

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 120  
 ctactccac atttcactac aaaccaagga aagctccctc atggaccgac atctggtgag  
 180  
 ccttcacttc tcccctggca atgcctggcc acctgacacc tggcctccct cctctttcca  
 240  
 gcaatcctgg taccaacgaa tggetcacca ccacccaccc caatgccag accgcagacc  
 300  
 tgcattctc ccatctcaca gcccacaaac caaacggta ttcattctac ctcccatcct  
 360

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 420  
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 480  
 ctgctatagg ctgctgtcac tccccctgca ggtgctgggg acaccgcaac cctcctcctg  
 540  
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 660  
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 720  
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 859

<210> 2406

<211> 149

<212> PRT

<213> Homo sapiens

<400> 2406

Met	Asp	Arg	His	Leu	Val	Ser	Leu	His	Leu	Ser	Pro	Gly	Asn	Ala	Trp
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Pro	Pro	Asp	Thr	Trp	Pro	Pro	Ser	Ser	Phe	Gln	Gln	Ser	Trp	Tyr	Gln
			20					25					30		
Arg	Met	Ala	His	His	His	Pro	Pro	Gln	Cys	Pro	Asp	Arg	Arg	Pro	Ala
		35					40				45				
Phe	Leu	Pro	Ser	His	Ser	Pro	Lys	Ser	Lys	Pro	Leu	Phe	Ile	Leu	Pro
	50					55				60					
Pro	Ile	Leu	Leu	Leu	Thr	Asn	Phe	Phe	His	Arg	Arg	Leu	Trp	Leu	Ile
65					70					75					80
Gly	Leu	Thr	Glu	Ala	Gln	Gly	Ser	Val	Ser	Val	Leu	Arg	Ala	Leu	Gln
			85						90					95	
Val	Ala	Ala	Pro	Cys	Ala	Gln	Ser	Gln	Ala	Pro	Cys	Tyr	Arg	Leu	Ala
			100					105					110		
Ala	Leu	Pro	Leu	Gln	Val	Leu	Gly	Thr	Pro	Gln	Pro	Ser	Ser	Trp	Gly
		115					120					125			
His	Leu	Leu	Ala	Phe	Ala	Gly	Pro	Arg	Gly	Ser	Leu	Leu	Pro	Gly	Ser
		130				135					140				
Arg	Leu	Trp	Val	Arg											
145															

<210> 2407

<211> 303

<212> DNA

<213> Homo sapiens

<400> 2407

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 120  
 cgccgaatgt ttggtggctc gacgacgtac attccgctca aggtaaacca atctggcggt  
 180  
 atccccgtca tctttgcctc gtcgacctg taccttccgg tgctctacgc aactttccgg  
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 300  
 tac  
 303

<210> 2408  
 <211> 101  
 <212> PRT  
 <213> Homo sapiens

<400> 2408  
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 20 25 30  
 Gln Tyr Ala Lys Arg Met Val Gly Arg Arg Met Phe Gly Gly Ser Thr  
 35 40 45  
 Thr Tyr Ile Pro Leu Lys Val Asn Gln Ser Gly Val Ile Pro Val Ile  
 50 55 60  
 Phe Ala Ser Ser Ile Leu Tyr Leu Pro Val Leu Tyr Ala Thr Phe Arg  
 65 70 75 80  
 Pro Gln Thr Ser Ala Ala Lys Trp Ile Gly His Tyr Phe Thr Arg Gly  
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 Asp His Pro Val Tyr  
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<210> 2409  
 <211> 322  
 <212> DNA  
 <213> Homo sapiens

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 180  
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 300  
 gggacatgag tgtcagtgtg gg  
 322

<210> 2410  
 <211> 106  
 <212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2410

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Met Val Ser Ser Pro His Cys Val Ser Pro Glu Ser Asn Trp Arg Pro
 1           5           10           15
Ser Asp Thr Thr Ser Arg Pro Asn Arg Arg Gly Ser Arg Asn Ser Asp
          20           25           30
Cys Gly Asn Cys Leu Gln Phe Ser Ser Gly Gln Met Thr Leu Pro Arg
          35           40           45
Leu Pro Arg Pro Trp Pro Lys Gly Ser Arg Gly Leu Gly Pro Thr Ala
          50           55           60
Asp Ala Arg Thr Leu Thr Pro Asp Ala Ser Glu Ala Ser Arg Trp Ala
          65           70           75           80
Leu Arg Gly Leu Leu Trp Leu Cys Ser Cys Trp Leu Gly Trp Gly Ser
          85           90           95
Asp Leu Val Arg Asp Met Ser Val Ser Val
          100           105

```

&lt;210&gt; 2411

&lt;211&gt; 371

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2411

```

ccatgggctg ggtgctggag acacgagatc aggcaggccc tgcccctggg gctcattcta
60
gggtctgcgg cagacaggga gacagaggga gctgtgagag ccctgaggct gagtggcttt
120
ctggggaagc accatcccta gggacctccg cgttcgggtca gtggccgctg ctgtcgggtg
180
gcagagcaga ggctggggcg agagtgggtca gcaggcctgc tgggtggcagc ttgtgcagga
240
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300
aggcctgggc ccgaggcctg ggtgtgggga cgcctgagga gactgtacag tgtggagtcg
360
gggggggctgc g
371

```

&lt;210&gt; 2412

&lt;211&gt; 123

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2412

```

Met Gly Trp Val Leu Glu Thr Arg Asp Gln Ala Gly Pro Ala Pro Gly
 1           5           10           15
Ala His Ser Arg Val Cys Gly Arg Gln Gly Asp Arg Gly Ser Cys Glu
          20           25           30
Ser Pro Glu Ala Glu Trp Leu Ser Gly Glu Ala Pro Ser Leu Gly Thr
          35           40           45
Ser Ala Phe Gly Gln Trp Pro Leu Leu Ser Val Cys Arg Ala Glu Ala
          50           55           60
Gly Ala Arg Val Val Ser Arg Pro Ala Gly Gly Ser Leu Cys Arg Lys

```

65		70		75		80									
Gly	Gly	Trp	Arg	Leu	Ala	Cys	Gly	Trp	Gln	Glu	Gly	Gly	Met	His	Val
				85					90					95	
Ala	Glu	Arg	Gln	Ala	Trp	Ala	Arg	Gly	Leu	Gly	Val	Gly	Thr	Pro	Glu
			100					105					110		
Glu	Thr	Val	Gln	Cys	Gly	Val	Gly	Gly	Ala	Ala					
		115					120								

&lt;210&gt; 2413

&lt;211&gt; 784

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2413

```

ccccggagag ttgggcgggg caggggtgtt catggcatatc tcgggattgt gtcatttggt
60
gtggctggat ttaggggtgca tataaaggca gtgaggctgg agaagtattc taggtctgct
120
taggctcact gaggaattgg ggttcttcct gaagagcatg gagcccttgg aggacctcca
180
cagcaggcag agagacggca gcctcctggg atctgattgc ccagccccac ttacacaggt
240
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360
accagggtgc aggcctggag attgcatgga ggccccgccc cccccaacca attctttgat
420
aatagcacag tgttgaagag agggggccat aaaagactga atccctgttc atgccaggct
480
ggctctgccc aacatatatg agactgcaag ttctgccact gtgggctgtg taccacaag
540
ccacagggtc ctctgaacct gtgaatcagg tcttgggagc tattcgagca ggctggattt
600
tctcctctgc ctcgggggac ctgagagtaa gttacagact tcatgaccct tcaccccaaa
660
acatttgagt atgtatcacc taagaacaag ggcattctcc tgtagaacca caatgcaatt
720
tgcaagtcca ggaaatttaa ctgatacaat actattatct aattacggag agaagacaac
780
gcgt
784

```

&lt;210&gt; 2414

&lt;211&gt; 137

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2414

Met	Lys	Ser	Val	Thr	Tyr	Ser	Gln	Val	Pro	Arg	Gly	Arg	Gly	Glu	Asn
1				5					10					15	
Pro	Ala	Cys	Ser	Asn	Ser	Ser	Gln	Asp	Leu	Ile	His	Arg	Phe	Arg	Gly
			20				25					30			
Thr	Cys	Gly	Leu	Trp	Val	His	Ser	Pro	Gln	Trp	Gln	Asn	Leu	Gln	Ser





ctctgtgat ctctgtgtt tcccttttct ttctggggcc aggaagtcag ggtcaactcc  
 1080  
 caggcctcag gtgaaggggc ccagaacacc tgctctcacc tgagccccag gtgaaggggc  
 1140  
 ccgggaacac ctgctctcac ctgagcccca ggtgaagggg cccgggaaca cctgctctca  
 1200  
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 1260  
 gcccggaaca cctgctctca cctgagcccc aggtgaaggg gcccggaaca cctgctctca  
 1320  
 cctgagcccc aggtgaaggg gcccggaac acctctcacc tgaaccggg ggtcccatcc  
 1380  
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 1680  
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 1860  
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 1920  
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 1980  
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 2040  
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 2160  
 aaaa  
 2164

<210> 2416

<211> 213

<212> PRT

<213> Homo sapiens

<400> 2416

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 20 25 30  
 Ala Leu Gly Arg Glu Tyr Val His Ala Arg Leu Leu Arg Ala Gly Leu  
 35 40 45  
 Ser Trp Ser Ala Pro Glu Arg Ala Ser Pro Ala Pro Gly Gly Arg Leu

50		55		60
Ala Glu Val Cys Ala Val Leu Leu Arg Leu Gly Asp Glu Leu Glu Met				
65	70	75	80	
Ile Arg Pro Ser Val Tyr Arg Asn Val Ala Arg Gln Leu His Ile Ser				
	85	90	95	
Leu Gln Ser Glu Pro Val Val Thr Asp Ala Phe Leu Ala Val Ala Gly				
	100	105	110	
His Ile Phe Ser Ala Gly Ile Thr Trp Gly Lys Val Val Ser Leu Tyr				
	115	120	125	
Ala Val Ala Ala Gly Leu Ala Val Asp Cys Val Arg Gln Ala Gln Pro				
	130	135	140	
Ala Met Val His Ala Leu Val Asp Cys Leu Gly Glu Phe Val Arg Lys				
145	150	155	160	
Thr Leu Ala Thr Trp Leu Arg Arg Arg Gly Gly Trp Thr Asp Val Leu				
	165	170	175	
Lys Cys Val Val Ser Thr Asp Pro Gly Leu Arg Ser His Trp Leu Val				
	180	185	190	
Ala Ala Leu Cys Ser Phe Gly Arg Phe Leu Lys Ala Ala Phe Phe Val				
	195	200	205	
Leu Leu Pro Glu Arg				
210				

&lt;210&gt; 2417

&lt;211&gt; 615

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2417

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60

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120

cagttgttag ttttcacact ttaaaaaagg ctttcaatta taaaatcttt ctccattatt

180

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240

ataacataat tgatgaaaag ttagtttttc acaaaaatac gaaaaatttc atcacctaga

300

gaggaaaatg ttatgacaac ctatttcgat aaaattgaaa aaatctcctt tgagggagaa

360

aaatccacaa atccttttgc tttcaaacaat tatgatgcta atcaagtaat tttaggtaaa

420

actatggctg aacatttacg cttaacgggtg tgttattggc ataccttttg ctggaatggg

480

aatgatatgt ttgggctagg ttctttggaa cgaagtggc agaaaaattc aaatttgctt

540

gctggcgag aacaaaaagc cgatattgct tttgagtttt tgaataagtt aggcgtgcct

600

tattattggt ttcac

615

&lt;210&gt; 2418

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2418

```

Met Thr Thr Tyr Phe Asp Lys Ile Glu Lys Ile Ser Phe Glu Gly Glu
 1           5           10           15
Lys Ser Thr Asn Pro Phe Ala Phe Lys His Tyr Asp Ala Asn Gln Val
           20           25           30
Ile Leu Gly Lys Thr Met Ala Glu His Leu Arg Leu Thr Val Cys Tyr
           35           40           45
Trp His Thr Phe Cys Trp Asn Gly Asn Asp Met Phe Gly Leu Gly Ser
           50           55           60
Leu Glu Arg Ser Trp Gln Lys Asn Ser Asn Leu Leu Ala Gly Ala Glu
65           70           75           80
Gln Lys Ala Asp Ile Ala Phe Glu Phe Leu Asn Lys Leu Gly Val Pro
           85           90           95
Tyr Tyr Cys Phe His
                100

```

&lt;210&gt; 2419

&lt;211&gt; 318

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2419

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ccccgtgacg ctgctttctt ttctgcctg cagctgaggg gtctgttttg tgctccttcc
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180
tgagacacat gcccagtcg aggtagatgt cgctgtcgtc ctgcggcggg gtgggtgggg
240
tccagaacgg catgacttct gtctgcccac cgacatcttc gtagacatac tccatgttgt
300
aggcatcccc tcacgcgt
318

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&lt;210&gt; 2420

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2420

```

Met Glu Tyr Val Tyr Glu Asp Val Asp Gly Gln Thr Glu Val Met Pro
 1           5           10           15
Phe Trp Thr Pro Pro Thr Pro Pro Gln Asp Asp Ser Asp Ile Tyr Leu
           20           25           30
Asp Ser Gly Met Cys Leu Met Tyr Glu Ala Thr Pro Ile Pro Glu Ala
           35           40           45
Lys Leu Pro Pro Val Tyr Val Arg Lys Glu Arg Lys Arg His Lys Thr
           50           55           60
Asp Pro Ser Ala Ala Gly Arg Lys Lys Lys Gln Arg His Gly Glu Ala
65           70           75           80
Val Val Pro Pro Arg Ser Leu Phe Asp Arg Ala Thr Pro Gly Leu Leu

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85                                      90                                      95  
 Lys Ile  
  
 <210> 2421  
 <211> 420  
 <212> DNA  
 <213> Homo sapiens  
  
 <400> 2421  
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 120  
 ctgtcgcaag tctgagtagg gattatcatg acggatacaa cttcagcccc gcgttacgcg  
 180  
 ctgcgtgggc tacagcttat tggctggcgt gacatgcaac acgcgctgga tttcctgttc  
 240  
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                   20                          25                          30  
 Asp Gly Gln Met Lys Ser Gly Thr Leu Val Ala Ile Asn Ala Glu Lys  
                   35                          40                          45  
 Met Leu Ala Val Glu Asp Asn Ala Glu Val Lys Ser Leu Ile Glu Ala  
                   50                          55                          60  
 Ala Glu Phe Lys Tyr Pro Ala Gly Ile Ser Val Val Arg Ser Ile Arg  
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 Lys Lys Phe Pro His Ala Gly Val Cys Ser Arg  
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 <210> 2423  
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 120

gaatgcgcag actgcaagtc aaagggctcct cgatgggcaa gtgtgaatct aggtatcttt  
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 240  
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<210> 2424

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2424

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		20						25					30		
Asp	Cys	Lys	Ser	Lys	Gly	Pro	Arg	Trp	Ala	Ser	Val	Asn	Leu	Gly	Ile
	35						40				45				
Phe	Ile	Cys	Met	Thr	Cys	Ser	Gly	Ile	His	Arg	Ser	Leu	Gly	Val	His
	50					55					60				
Ile	Ser	Lys	Val	Arg	Ser	Ala	Thr	Leu	Asp	Thr	Trp	Leu	Pro	Glu	Gln
65				70					75					80	
Val	Ala	Phe	Ile	Gln	Ser	Met	Gly	Asn	Glu	Lys	Ala	Asn	Ser	Tyr	Trp
			85						90					95	
Glu	Ala	Glu	Leu	Pro	Pro	Asn	Tyr	Asp	Arg	Val	Gly	Ile	Glu	Asn	Leu
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<210> 2425

<211> 411

<212> DNA

<213> Homo sapiens

<400> 2425

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 411

<210> 2426

<211> 137  
 <212> PRT  
 <213> Homo sapiens

<400> 2426  
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 Arg Glu His Glu Ala Xaa Ala Met Thr Ser Arg Pro Ala Arg Gly Phe  
 35 40 45  
 Gly Phe Thr Ala His Ala Gln Pro Glu Glu Arg Pro Arg Cys Lys Glu  
 50 55 60  
 Ala Gly Met Asn Asp Cys Leu Phe Lys Pro Ile Ser Leu Thr Thr Leu  
 65 70 75 80  
 Asn Gln Lys Leu Ala Asp Val Thr Pro Arg Pro Arg Pro Ser Gln Ala  
 85 90 95  
 Ala Phe Ser Leu Asp Gly Leu His Ala Leu Thr Gly Gly Glu Pro Leu  
 100 105 110  
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 115 120 125  
 Arg Glu Ala Leu Leu Gly Leu Pro Ile  
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<210> 2427  
 <211> 293  
 <212> DNA  
 <213> Homo sapiens

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 120  
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 180  
 aatggcgaag aaaatgtgcc tctttcagga aaagtatagg aaatgagaga agactgtgac  
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<210> 2428  
 <211> 72  
 <212> PRT  
 <213> Homo sapiens

<400> 2428  
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 20 25 30  
 Arg Arg Ser Arg His Pro Ala Asp Gly Ala Gln Gln Glu Arg Cys Cys  
 35 40 45  
 Val Pro Pro Gly Glu Arg Cys Pro Ser Ala Pro Asp Asn Gly Glu Glu

50 55 60  
 Asn Val Pro Leu Ser Gly Lys Val  
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<210> 2429  
 <211> 428  
 <212> DNA  
 <213> Homo sapiens

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 <211> 142  
 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Thr Ser Thr Gly Pro Gln Pro Gly Ala Leu Ala Leu Leu Glu Gln Ala  
 50 55 60  
 Val His Glu Leu Asp Gly Thr Gly Asp Ala Asp Pro Arg Ala Ala Glu  
 65 70 75 80  
 Leu Ala Glu Arg Ala Arg Gln Met Ser Tyr Asp Leu Thr Asp Leu Ala  
 85 90 95  
 Ala Ser Val Ala Gly His Ala Ala Arg Ala Glu Ala Asp Pro Gln Arg  
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 Leu Glu Glu Leu Gly Gly Arg Leu Ala Ala Ile Gln Arg Leu Leu Arg  
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 Ala Arg Thr Thr Thr Leu Asp Asp Leu Leu Asp Ser Thr Ala  
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<210> 2431  
 <211> 409



&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2431

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 240  
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 300  
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 409

&lt;210&gt; 2432

&lt;211&gt; 108

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2432

Met	Gly	Gln	Phe	Ile	Ile	Gln	Gly	Gly	Cys	Gln	Leu	Asn	Gly	Glu	Val
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Thr	Ile	Ser	Gly	Ala	Lys	Asn	Ala	Ala	Leu	Pro	Ile	Leu	Phe	Ala	Thr
			20					25					30		
Leu	Leu	Ser	Glu	Gly	Asp	Ile	Asn	Leu	Ser	Asn	Val	Pro	Leu	Leu	Lys
		35					40				45				
Asp	Ile	Ala	Thr	Thr	Ile	Glu	Leu	Leu	Lys	Glu	Leu	Gly	Ala	Thr	Ala
	50					55				60					
Thr	Gln	Thr	Gln	His	Cys	Val	His	Ile	Asn	Ala	Lys	Glu	Val	Lys	Asn
65				70					75					80	
Tyr	Thr	Ala	Ser	Tyr	Glu	Leu	Val	Arg	Ser	Met	Arg	Ala	Ser	Ile	Leu
			85					90						95	
Ala	Leu	Gly	Pro	Leu	Val	Ala	Arg	Phe	Gly	Glu	Ala				
			100					105							

&lt;210&gt; 2433

&lt;211&gt; 655

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2433

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 420  
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 480  
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 655

<210> 2434

<211> 137

<212> PRT

<213> Homo sapiens

<400> 2434

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Cys	Ser	Glu	Thr	Val	Pro	Phe	Ala	Lys	Pro	Pro	Ser	Leu	Gly	Phe	Cys
		20						25					30		
Lys	Ser	Lys	Gly	Cys	Val	Trp	Asn	Thr	Ala	Val	Thr	Glu	Lys	Val	Leu
		35					40					45			
Phe	Ala	Gln	Ser	Ala	Arg	Pro	Leu	Leu	Leu	Ser	Leu	Met	Ser	Pro	Asp
		50				55					60				
Trp	Ala	Phe	Ile	Val	Pro	Cys	Thr	Glu	Ala	Ser	Leu	Ser	Pro	Arg	Ser
65					70					75				80	
Cys	Leu	Phe	Gly	Arg	Gly	Ser	Thr	Asn	Gly	Ser	Thr	Leu	Pro	Pro	Thr
				85					90					95	
Pro	Thr	Ala	Arg	Pro	Ala	Gly	Pro	Val	Val	Gln	Leu	Glu	Lys	Ala	Arg
				100				105						110	
Leu	Leu	Ser	Ser	Pro	Ala	Leu	Cys	Cys	Ala	Gly	Ala	Leu	His	Leu	Asn
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Phe	Arg	Gly	Lys	Pro	Gly	Lys	Arg	Leu							
		130					135								

<210> 2435

<211> 401

<212> DNA

<213> Homo sapiens

<400> 2435

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 240

aaactcgttg cggagtttga gaagctcaat ctgggcaatg gtatggacga aggtattacc  
 300  
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 401

<210> 2436  
 <211> 133  
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<400> 2436  
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 Ala Pro Phe Ile Val Phe Glu Asp Ala Asp Ile Asp Gln Ala Val Gln  
 35 40 45  
 Gly Ala Met Gly Ala Lys Met Arg Asn Ile Gly Glu Ala Cys Thr Ala  
 50 55 60  
 Ala Asn Arg Phe Leu Val His Glu Ser Val Ala Glu Glu Phe Ser Glu  
 65 70 75 80  
 Lys Leu Val Ala Glu Phe Glu Lys Leu Asn Leu Gly Asn Gly Met Asp  
 85 90 95  
 Glu Gly Ile Thr Cys Gly Pro Leu Val Glu Ser Lys Ala Leu Glu Ser  
 100 105 110  
 Ile Ala Ala Leu Val Asp Asp Ala Ala Glu Lys Gly Ala Thr Ile Ser  
 115 120 125  
 Thr Gly Gly Lys Arg  
 130

<210> 2437  
 <211> 449  
 <212> DNA  
 <213> Homo sapiens

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 449

&lt;210&gt; 2438

&lt;211&gt; 99

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2438

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Met Val Glu His Glu Glu Glu Asn Cys Leu Leu Asn Pro Thr Thr Tyr
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Cys Asp Thr Val Thr Gly Pro Cys Ser Gly Leu Asp Ser Cys Ile Arg
          20             25             30
Val Leu Asp Gly Asn Arg Trp His Ser Lys Gly Gly Ala Gln Phe Arg
          35             40             45
Glu Met Pro Met Tyr Gly Phe Gly Pro Met Pro Gln Pro Asp Leu Arg
          50             55             60
Asp Leu Arg Gly Ser Ala Pro Arg Pro Pro Leu His Ile Cys Asp Pro
65             70             75             80
Thr His Phe His Pro Ser Ala Thr Phe Lys Phe Gln Ser Phe His Phe
          85             90             95
Ile Ala Val

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&lt;210&gt; 2439

&lt;211&gt; 4425

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2439

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780

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<210> 2440

<211> 1306

<212> PRT

<213> Homo sapiens

<400> 2440

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Thr	Asp	Asn	Ile	Lys	Lys	Thr	Leu	His	Lys	Phe	Cys	Gly	Pro	Ser	Pro
		20						25				30			
Val	Val	Phe	Ser	Asp	Val	Asn	Ser	Met	Tyr	Leu	Ser	Ser	Thr	Glu	Pro
		35				40					45				
Pro	Ala	Ala	Ala	Glu	Trp	Ala	Cys	Leu	Leu	Arg	Pro	Leu	Arg	Gly	Arg
	50				55					60					
Glu	Pro	Glu	Gly	Val	Trp	Asn	Leu	Leu	Ser	Ile	Val	Arg	Glu	Met	Phe
65				70					75					80	
Lys	Arg	Arg	Asp	Ser	Asn	Ala	Ala	Pro	Leu	Leu	Glu	Ile	Leu	Thr	Asp
			85					90					95		
Gln	Cys	Leu	Thr	Tyr	Glu	Gln	Ile	Thr	Gly	Trp	Trp	Tyr	Ser	Val	Arg
		100					105					110			
Thr	Ser	Ala	Ser	His	Ser	Ser	Ala	Ser	Gly	His	Thr	Gly	Arg	Ser	Asn
	115					120					125				
Gly	Gln	Ser	Glu	Val	Ala	Ala	His	Ala	Cys	Ala	Ser	Met	Cys	Asp	Glu
	130				135					140					
Met	Val	Thr	Leu	Trp	Arg	Leu	Ala	Val	Leu	Asp	Pro	Ala	Leu	Ser	Pro
145				150					155					160	
Gln	Arg	Arg	Arg	Glu	Leu	Cys	Thr	Gln	Leu	Arg	Gln	Trp	Gln	Leu	Lys
		165						170					175		
Val	Ile	Glu	Asn	Val	Lys	Arg	Gly	Gln	His	Lys	Lys	Thr	Leu	Glu	Arg
	180						185					190			
Leu	Phe	Pro	Gly	Phe	Arg	Pro	Ala	Val	Glu	Ala	Cys	Tyr	Phe	Asn	Trp
	195					200					205				
Glu	Glu	Ala	Tyr	Pro	Leu	Pro	Gly	Val	Thr	Tyr	Ser	Gly	Thr	Asp	Arg
	210				215					220					
Lys	Leu	Ala	Leu	Cys	Trp	Ala	Arg	Ala	Leu	Pro	Ser	Arg	Pro	Gly	Ala
225				230					235					240	
Ser	Arg	Ser	Gly	Gly	Leu	Glu	Glu	Ser	Arg	Asp	Arg	Pro	Arg	Pro	Leu
		245						250				255			
Pro	Thr	Glu	Pro	Ala	Val	Arg	Pro	Lys	Glu	Pro	Gly	Thr	Lys	Arg	Lys

	260		265		270
Gly	Leu	Gly	Glu	Gly	Val
	275		280		285
Ser	Ala	Glu	Gly	Gly	Asp
	290		295		300
Gly	Lys	Ala	Lys	Ala	Leu
	305		310		315
Ala	Gly	Gly	Gly	Ser	Lys
	325		330		335
Glu	Pro	Asp	Leu	Ala	Glu
	340		345		350
Gly	Ala	Glu	Ala	Ser	Thr
	355		360		365
Cys	Pro	Leu	His	Gly	Gly
	370		375		380
Pro	Pro	Asp	Thr	Tyr	Glu
	385		390		395
Pro	Glu	Pro	Pro	Thr	Ala
	405		410		415
Asp	Val	Cys	Thr	Gln	Asp
	420		425		430
Gly	Leu	Pro	Lys	Thr	Lys
	435		440		445
Asp	Asp	Tyr	Gln	Ala	Tyr
	450		455		460
Glu	Glu	Glu	Lys	Ala	Glu
	465		470		475
Ala	Gly	Leu	Lys	Pro	Leu
	485		490		495
Ala	Cys	Ala	Glu	Ala	Leu
	500		505		510
Arg	Leu	Thr	Val	Glu	Leu
	515		520		525
Leu	Lys	Gly	Lys	Lys	Asn
	530		535		540
Ala	Thr	Asn	Thr	Leu	Ser
	545		550		555
Glu	Arg	Pro	Glu	Arg	His
	565		570		575
Leu	Glu	Leu	Gln	Arg	Pro
	580		585		590
Leu	Ala	Tyr	Gln	Glu	Ser
	595		600		605
Leu	Gly	Pro	Ser	Glu	Met
	610		615		620
Arg	Glu	Gly	Thr	Leu	Cys
	625		630		635
Ala	Ser	Phe	Ile	Phe	Asp
	645		650		655
Gly	Ser	Arg	Pro	Pro	Ser
	660		665		670
Glu	Glu	Leu	Gly	Phe	Glu
	675		680		685
Thr	Val	Ser	Glu	Ala	Glu



690		695		700
Glu Lys Gly Asp Leu Ala Leu Met Ile Thr Tyr Lys Asp Asp				
705	710		715	720
Gln Ala Lys Leu Lys Lys Ile Leu Asp Lys Leu Leu Asp Arg Glu Ser				
	725		730	735
Gln Thr His Lys Pro Gln Thr Leu Ser Ser Phe Tyr Ser Ser Ser Arg				
	740		745	750
Pro Thr Thr Ala Ser Gln Arg Ser Pro Ser Lys His Gly Gly Pro Ser				
	755		760	765
Ala Pro Gly Ala Leu Gln Pro Leu Thr Ser Gly Ser Ala Gly Pro Ala				
	770		775	780
Gln Pro Gly Ser Val Ala Gly Ala Gly Pro Gly Pro Thr Glu Gly Phe				
785	790		795	800
Thr Glu Lys Asn Val Pro Glu Ser Ser Pro His Ser Pro Cys Glu Gly				
	805		810	815
Leu Pro Ser Glu Ala Ala Leu Thr Pro Arg Pro Glu Gly Lys Val Pro				
	820		825	830
Ser Arg Leu Ala Leu Gly Ser Arg Gly Gly Tyr Asn Gly Arg Gly Trp				
	835		840	845
Gly Ser Ser Gly Arg Pro Lys Lys Lys His Thr Gly Met Ala Ser Ile				
	850		855	860
Asp Ser Ser Ala Pro Glu Thr Thr Ser Asp Ser Ser Pro Thr Leu Ser				
865	870		875	880
Arg Arg Pro Leu Arg Gly Gly Trp Ala Pro Thr Ser Trp Gly Arg Gly				
	885		890	895
Gln Asp Ser Asp Ser Ile Ser Ser Ser Ser Asp Ser Leu Gly Ser				
	900		905	910
Ser Ser Ser Ser Gly Ser Arg Arg Ala Ser Ala Ser Gly Gly Ala Arg				
	915		920	925
Ala Lys Thr Val Glu Val Gly Arg Tyr Lys Gly Arg Arg Pro Glu Ser				
	930		935	940
His Ala Pro His Val Pro Asn Gln Pro Ser Glu Ala Ala Ala His Phe				
945	950		955	960
Tyr Phe Glu Leu Ala Lys Thr Val Leu Ile Lys Ala Gly Gly Asn Ser				
	965		970	975
Ser Thr Ser Ile Phe Thr His Pro Ser Ser Ser Gly Gly His Gln Gly				
	980		985	990
Pro His Arg Asn Leu His Leu Cys Ala Phe Glu Ile Gly Leu Tyr Ala				
	995		1000	1005
Leu Gly Leu His Asn Phe Val Ser Pro Asn Trp Leu Ser Arg Thr Tyr				
	1010		1015	1020
Ser Ser His Val Ser Trp Ile Thr Gly Gln Ala Met Glu Ile Gly Ser				
1025	1030		1035	1040
Ala Ala Leu Thr Ile Leu Val Glu Cys Trp Asp Gly His Leu Thr Pro				
	1045		1050	1055
Pro Glu Val Ala Ser Leu Ala Asp Arg Ala Ser Arg Ala Arg Asp Ser				
	1060		1065	1070
Asn Met Val Arg Ala Ala Ala Glu Leu Ala Leu Ser Cys Leu Pro His				
	1075		1080	1085
Ala His Ala Leu Asn Pro Asn Glu Ile Gln Arg Ala Leu Val Gln Cys				
	1090		1095	1100
Lys Glu Gln Asp Asn Leu Met Leu Glu Lys Ala Cys Met Ala Val Glu				
1105	1110		1115	1120
Glu Ala Ala Lys Gly Gly Gly Val Tyr Pro Glu Val Leu Phe Glu Val				

	1125		1130		1135
Ala	His	Gln	Trp	Phe	Trp
	1140		1145		1150
Thr	Ala	Arg	Glu	Gly	Ala
	1155		1160		1165
Gly	Gly	Glu	Ala	Gly	Arg
	1170		1175		1180
Thr	Glu	Pro	Val	Thr	Val
	1185		1190		1195
Val	Val	Pro	Val	Ile	Ser
	1205		1210		1215
Leu	Gly	His	Gly	His	Ser
	1220		1225		1230
Pro	His	Leu	Pro	Cys	Ser
	1235		1240		1245
Ala	His	Pro	Met	Pro	His
	1250		1255		1260
Ser	Ser	Ala	Tyr	Pro	Gln
	1265		1270		1275
His	Gly	Lys	Ile	Leu	Gly
	1285		1290		1295
Glu	Tyr	Asn	Trp	Ser	Val
	1300		1305		

&lt;210&gt; 2441

&lt;211&gt; 2244

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2441

nacgcgtgtg tgtctgcatg catccatgtg tctgtacatg tatgtctcca tgtgtggtgt  
 60  
 ggaggacaca gaaggatgga gggaaaggca ccactcacag aggcggcgct ggagaatttt  
 120  
 ccatttggtta ttttgggttt ggtgaacatg cactttgcgt catgcaaatc aggtttctaa  
 180  
 acattaacaa ccggagagaa atgacatttt ggggcccgcg gtgactcttg cgtgcctctg  
 240  
 ctgccccctg gtggcagccc cgagtcactt ccagcagggc cccccaccc caagggccca  
 300  
 gcctcgggca ggaagggtac aaagcccccg ccgtggttct gccacgaggt ctcttgga  
 360  
 tgaggggaac agcacagcga cgtccttgcg tcctaaatgc atcccctggt ggccgttttt  
 420  
 cgccacacag gcttggcaaa atctctgcgt cactgagcag cattttaacc tcttgaatga  
 480  
 gatgcctccg accttttgga tcctctttct gcacctctca ggggacaggt cccgtctgta  
 540  
 cggcgctgcc tacgagaaac ccaagttcat tactgcagcc aaaggaaagg tgcaggcggt  
 600  
 gggaggctcc tgcaagggtga tgcgtctggc cataagtccc actgccttct cccacctgct  
 660  
 ggccctgtgc cagcagttcc ggaagcagac ccaggcccag gtgtacagtg aggacatggc  
 720

cctgaacata ggctcggaac cagaaggcct gcaggtggaa gagaaggagc gccctgtgca  
780  
gaggctcagt agcgtcctgg ggccccctgga ggagcttctg cagccgctat tccccctgct  
840  
cagcctctcc aaggccagag tgcagacacc tgcggttgtt gccgattcag ggaagtcgaa  
900  
gggcaaagac aaggagagga aaacgtccac aggacaacac agcacagtcc agcctgaggt  
960  
tgccgataag atagtcttgg tcacagacag acatctcctg gagctgccac tggaaggtct  
1020  
ctctgtgttc gatgaaggga caatttcttc tgtgtcacga gaattttctc ttcaaatgct  
1080  
gtggaatcgc ctccataaag aagagacaga aggtggcgtg aaaaaggagg gaagaagcag  
1140  
agaccccaaa aagagaagcc tagcgaagaa gggcaggaag ggcagcatcc cccggacat  
1200  
ccccctgac tgcatacatg tcgactcaga caacttcaag ttcgtcgtgg acccatacga  
1260  
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1320  
attccaagac acattcacgt cgcgatgggc gggacatctg ggaagcaagc actttcccag  
1380  
ccaggcccag tgggagcagg ccctgggcag ctgcagcggt ttcttcttct atggaatgga  
1440  
gagcttctct tcccatatat tagtgagag attggtcgc atgaacttgc aagagtgcca  
1500  
ggtggcagtc ctgctggacc tggcacggtc ctaccagagc ttgaagaggc acatggagag  
1560  
cgtggagcac aggagatctg ttggccgttg ggaagccaat tggagaaacg gtgcgtctcc  
1620  
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1680  
acaagctgct gctgctccaa agctccgagc tccttccac cagctcaac ttggtcctgt  
1740  
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1800  
tggggcccca gcaattgect ctgcccttgg ctctgcccct ctgccaaccc atccccacct  
1860  
cccgtctccc atccccagct ccagctcgc tctccccttc ctgggcctct cccagccct  
1920  
tggtgcagcc tcagccaggg accctcccc agcgacttcc cgcaaggcag ccgcctggac  
1980  
ctcgagctct gcctgcctgt gtgcgccatg gggctctgct cggggctgga gctgcgtctc  
2040  
ttccccgggc caggacaagg gcggcctccc cttggcggcg ctggtgctga gttgcttaga  
2100  
ccagaagact attcagaccg tgagcctggt tttgatttga gtgttccact aaacaaacaa  
2160  
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2220  
aaaaaaaaa aaaaaaaaaa aaaa  
2244

&lt;210&gt; 2442

<211> 168  
 <212> PRT  
 <213> Homo sapiens

<400> 2442  
 Met Gly Cys Arg Thr Lys Pro Ser Gly Ser Ala Gly Leu Asp Leu Pro  
 1 5 10 15  
 Pro Ile Ser Cys Trp Gly Pro Ser Thr Cys Leu Cys Pro Trp Leu Cys  
 20 25 30  
 Pro Ser Ala Asn Pro Ser Pro Pro Gly Ser His Pro Gln Leu Pro  
 35 40 45  
 Ala Arg Ser Pro Leu Pro Gly Pro Leu Pro Ser Pro Trp Cys Ser Leu  
 50 55 60  
 Ser Gln Gly Pro Ser Pro Ser Asp Phe Pro Gln Gly Ser Arg Leu Asp  
 65 70 75 80  
 Leu Glu Leu Cys Leu Pro Val Cys Ala Met Gly Ser Ala Ser Gly Leu  
 85 90 95  
 Glu Leu Arg Leu Phe Pro Gly Pro Gly Gln Gly Arg Pro Pro Leu Gly  
 100 105 110  
 Gly Ala Gly Ala Glu Leu Leu Arg Pro Glu Asp Tyr Ser Asp Arg Glu  
 115 120 125  
 Pro Val Phe Asp Leu Ser Val Pro Leu Asn Lys Gln Gln Lys Pro Lys  
 130 135 140  
 Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys  
 145 150 155 160  
 Lys Lys Lys Lys Lys Lys Lys  
 165

<210> 2443  
 <211> 361  
 <212> DNA  
 <213> Homo sapiens

<400> 2443  
 nccgtgcgcg ctatcttgcg tcgtacgccg tccaggggaag atgaaaaaat gctacaaacg  
 60  
 gccgatggac gattgcgcgcat tgatatcgaa tccatgcgca cctttgtaga gggcaaagaa  
 120  
 gtccatttga cgaaaaacga atttttaatt gtgcagactt tgtttacgca cccaataag  
 180  
 atctatacgc gcgatgaaat tatcgaagtc accttcggaa tggattatga ggcctttgac  
 240  
 cgtgccattg atacccatat caaaaacatt cgccagaaga ttgaagcgga tccgaaaaac  
 300  
 cccgtctata tccgcacggg ttatgggtgac gggtatctgc ccggaggctt tgatgaagct  
 360  
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 361

<210> 2444  
 <211> 120  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 2444

Xaa Val Arg Ala Ile Leu Arg Arg Thr Pro Ser Arg Glu Asp Glu Lys  
 1 5 10 15  
 Met Leu Gln Thr Ala Asp Gly Arg Leu Arg Ile Asp Ile Glu Ser Met  
 20 25 30  
 Arg Thr Phe Val Glu Gly Lys Glu Val His Leu Thr Lys Asn Glu Phe  
 35 40 45  
 Leu Ile Val Gln Thr Leu Phe Thr His Pro Asn Lys Ile Tyr Thr Arg  
 50 55 60  
 Asp Glu Ile Ile Glu Val Thr Phe Gly Met Asp Tyr Glu Ala Phe Asp  
 65 70 75 80  
 Arg Ala Ile Asp Thr His Ile Lys Asn Ile Arg Gln Lys Ile Glu Ala  
 85 90 95  
 Asp Pro Lys Asn Pro Val Tyr Ile Arg Thr Val Tyr Gly Val Gly Tyr  
 100 105 110  
 Leu Pro Gly Gly Phe Asp Glu Ala  
 115 120

&lt;210&gt; 2445

&lt;211&gt; 403

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2445

agatctgttg aatgaagcag gtgccactta gacattcact tcactgactc caaccacaac  
 60  
 ctccccctta tttgatatcc tgctcttggc agaaggatgg agaaagagca tcgcacaaag  
 120  
 aggaagcatg tttatcctgt tcagattact gcttctgccca ggctgctgct gctgttggtt  
 180  
 tctgcacatt tgctctttat taagcaaatg tcagagctgg gtgctggcaa gggaatcccc  
 240  
 tgtatttaca caggtaaacc tgagagccag agggccccaa accatcctgg ctgcgaggga  
 300  
 caagctatta gagttaataa cagtgcactg gcattccttc aaaatcctaa tggaagcata  
 360  
 aataaaaaga ggaaagtccc ctttacccaa gaacctgaaa aan  
 403

&lt;210&gt; 2446

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2446

Met Glu Lys Glu His Arg Thr Lys Arg Lys His Val Tyr Pro Val Gln  
 1 5 10 15  
 Ile Thr Ala Ser Ala Arg Leu Leu Leu Leu Gly Ser Ala His Leu  
 20 25 30  
 Leu Phe Ile Lys Gln Met Ser Glu Leu Gly Ala Gly Lys Gly Ile Pro  
 35 40 45  
 Cys Ile Tyr Thr Gly Lys Pro Glu Ser Gln Arg Ala Pro Asn His Pro  
 50 55 60  
 Gly Cys Glu Gly Gln Ala Ile Arg Val Asn Asn Ser Ala Leu Ala Phe



```

65          70          75          80
Leu Leu Ser Asp Val Asp Ala Leu Tyr Thr Ala His Pro Asp Ser Pro
      85          90          95
Asp Ala Arg Arg Val Glu Val Val Glu Asp Ile Asp Ala Leu Asp Val
      100         105         110
Asp Thr His Lys Ala Gly Ser Gly Val Gly Thr Gly Gly Met Thr Thr
      115         120         125
Lys Leu Glu Ala Ala Arg Met Ala Thr Cys Ala Gly Val Pro Val Val
      130         135         140
Leu Ala Ala Ala Val Asp Ala Pro Asp Val Leu Ala Gly Ala Pro Val
      145         150         155         160
Gly Thr Tyr Phe Arg Pro Leu Ala Thr Arg Arg Pro Arg Arg Leu Leu
      165         170         175
Trp Leu Ala Asp Ala Ala Thr Pro Gln Gly Gln Ile Val Ile Asp Asp
      180         185         190
Gly Ala Val Glu Ala Leu Thr Gln Arg His Ser Ser Leu Leu Ala Val
      195         200         205
Gly Val Thr Arg Val His Gly Asp Phe Gln Ala Gly Asp Pro Val Thr
      210         215         220
Ile Leu Ala Ser Asp Gly Arg Val Val Gly Arg Gly Ile Ala Gln Phe
      225         230         235         240
Ser His Asp Glu Val Arg Val Met
      245

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<210> 2449  
 <211> 296  
 <212> DNA  
 <213> Homo sapiens

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<400> 2449
gtgcactttg ttacagccct ggaacatgaa cacatgccgt catcaactcc ccaaaatctc
60
ctactgctct cccctcctcc ctggggccctg tcctatcccc agaggccaga caggccttcc
120
tcgcatgcaa gagtctccct cgccctgccc gacagtggcc tccatctacc tgctgtctt
180
gctggactcc agaactcc agtcctttcc cccttggggg ttgggggggg ccccccttt
240
ttttccccc ctttccctct tcattccaca ggaggccagc ctcaacatcc cncccc
296

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<210> 2450  
 <211> 90  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2450
Met Asn Thr Cys Arg His Gln Leu Pro Lys Ile Ser Tyr Cys Ser Pro
1          5          10          15
Leu Leu Pro Gly Pro Cys Pro Ile Pro Arg Gly Gln Thr Gly Leu Pro
20         25         30
Arg Met Gln Glu Ser Pro Ser Pro Cys Arg Thr Val Ala Ser Ile Tyr
35         40         45
Leu Pro Val Leu Leu Asp Ser Arg Thr Leu Gln Ser Phe Pro Pro Trp

```

50                      55                      60  
 Gly Leu Gly Gly Ala Pro Pro Phe Phe Pro Pro Leu Ser Leu Phe Ile  
 65                      70                      75                      80  
 Pro Gln Glu Ala Ser Leu Asn Ile Pro Xaa  
                     85                      90

&lt;210&gt; 2451

&lt;211&gt; 589

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2451

nacgcgtgac tggattgctc aacgggtgag gaatcgagcg gttacgatgt cgggccgac  
 60  
 tgcaacgatg atcttgtgag cgatgtattg accggtgtgt gggccgatct tgtgggccag  
 120  
 gagaaggctg tcggggctct gcgtcgtgcc gccgaatcgc agccggggcg ctgcgtccat  
 180acgcatggct cattacgggt ccgcctggat caggtcggtc gaatgctgcg 240  
 aaggcctttg cagcggcgct acagtgcgtc gaccatggat gcgggcagtg caatgcctgt  
 300  
 cgaaccngcc tgtcaggcgc ccacctcgac gtcaccctcg tgcgtactga ggcgctgtct  
 360  
 attggcgtcg attgaggtcg tgaaatgggt ttgttcgagc gggcgatgaa ttcgggtccc  
 420  
 cggggcgctcc ccagggttgt cgctcgtcgaa gatgccgacc gcatcactga acgcgagct  
 480  
 gacgccttgc ttaaagctat cgaggagcct gcgccgaaaa ccgtctggtt gctgtgtgcc  
 540  
 cctactccag aggacgtcat cgtcacgac aggtcgagat gtcggcgcc  
 589

&lt;210&gt; 2452

&lt;211&gt; 121

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2452

Leu Asp Cys Ser Thr Gly Glu Glu Ser Ser Gly Tyr Asp Val Gly Pro  
 1                      5                      10                      15  
 Ile Cys Asn Asp Asp Leu Val Ser Asp Val Leu Thr Gly Val Trp Ala  
                     20                      25                      30  
 Asp Leu Val Gly Gln Glu Lys Ala Val Gly Val Leu Arg Arg Ala Ala  
                     35                      40                      45  
 Glu Ser Gln Pro Gly Arg Ser Ser His Ala Met Ser His Ala Trp Leu  
                     50                      55                      60  
 Ile Thr Gly Pro Pro Gly Ser Gly Arg Ser Asn Ala Ala Lys Ala Phe  
 65                      70                      75                      80  
 Ala Ala Ala Leu Gln Cys Val Asp His Gly Cys Gly Gln Cys Asn Ala  
                     85                      90                      95  
 Cys Arg Thr Xaa Leu Ser Gly Ala His Pro Asp Val Thr Leu Val Arg  
                     100                      105                      110  
 Thr Glu Ala Leu Ser Ile Gly Val Asp  
                     115                      120



<210> 2453  
 <211> 695  
 <212> DNA  
 <213> Homo sapiens

<400> 2453  
 nnacgcgtca gccatctgtg agtgctcaca ctatacacac atccccgggc acactcaggg  
 60  
 agattcacac attcctacga gcacacatgt gcctgcatga gttattcccc atgtgaacac  
 120  
 acagggttggc acacgcacat gcccctgggt atgctcatgt ccattcatcc atcccgacct  
 180  
 gtgcacgtcc tctcactcct gtgttcacac ctatgcccac atgaaccaag ggacacacat  
 240  
 gcacaccctt atgtgggtgca cacacactcg tgcacacgga gccacaccag cacatgctca  
 300  
 gaggcatttg tgtcgctggg catttgacgc atgactcaga acggagtatg gggtagcgcg  
 360  
 gcgtggctgg ggaggtccca tcagcccgcc tctgaaaccc tcccaacctg cccatcctgg  
 420  
 cccaggcact gtgtctccgg cttgggcttc agccccggac cccaggacac cccggacaaa  
 480  
 gaggagctgc tctcgtctga agcctgctac gaatgcagga tcaatggcct ctcccctcgg  
 540  
 gaccggccac gacgcagtgc ccacaggac caccaggtga catgggtgct gcactaggca  
 600  
 ggggtggcca gggaatgggt gagtgtggga aagaggctgt ggacccgact tagtcatgtc  
 660  
 agccccccga agaaggagca ccaggctcca gatct  
 695

<210> 2454  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 2454  
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 1 5 10 15  
 Leu Gly Met Leu Met Ser Ile His Pro Ser Gln Pro Val His Val Leu  
 20 25 30  
 Ser Leu Leu Cys Ser His Leu Cys Pro Asn Glu Pro Arg Asp Thr His  
 35 40 45  
 Ala His Pro Tyr Val Val His Thr His Ser Cys Thr Arg Ser His Thr  
 50 55 60  
 Ser Thr Cys Ser Glu Ala Phe Val Cys Val Gly Ile Cys Ser Met Thr  
 65 70 75 80  
 Gln Asn Gly Val Trp Gly Gly Ala Ala Trp Leu Gly Arg Ser His Gln  
 85 90 95  
 Pro Ala Ser Glu Thr Leu Pro Thr Cys Pro Ser Trp Pro Arg His Cys  
 100 105 110  
 Val Ser Gly Leu Gly Phe Ser Pro Gly Pro Gln Asp Thr Pro Asp Lys  
 115 120 125  
 Glu Glu Leu Leu Ser Ser Glu Ala Cys Tyr Glu Cys Arg Ile Asn Gly

130	135	140
Leu Ser Pro Arg Asp Arg Pro Arg Arg Ser Ala His Arg Asp His Gln		
145	150	155
Val Thr Trp Val Leu His		160
165		

<210> 2455  
 <211> 378  
 <212> DNA  
 <213> Homo sapiens

<400> 2455  
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 60  
 ggaaccgctc agaaggaaat ccacgcgctg ccgatcatga aggcgctccc catgggcgtc  
 120  
 aaagaactcg ttctgggcca atcgaagtgg caggacgagt tgatcaacaa cttcatcgtc  
 180  
 gcgctgtttt caggcggtgt gttgctgttc gcggtgctgg tgctgctgta ccggcgcttg  
 240  
 ctgccgcctg tcatcaacgt gatgtcgtg gcggtggcac cgctgggcgg gttgatcggc  
 300  
 ctgtggctga ccaacacgcc gatctcgatg ccggtctata tcggcttgat catgctgctc  
 360  
 ggcacgtcgc ccaagaat  
 378

<210> 2456  
 <211> 126  
 <212> PRT  
 <213> Homo sapiens

<400> 2456  
 Thr Arg Arg Gln Lys Arg Gln Leu Thr Val Gly Ala Asp Leu Ser Pro  
 1 5 10 15  
 Gly Val Val Ser Gly Thr Ala Gln Lys Glu Ile His Ala Leu Pro Ile  
 20 25 30  
 Met Lys Ala Leu Pro Met Gly Val Lys Glu Leu Val Leu Gly Glu Ser  
 35 40 45  
 Lys Trp Gln Asp Glu Leu Ile Asn Asn Phe Ile Val Ala Leu Phe Ala  
 50 55 60  
 Gly Val Val Leu Leu Phe Ala Val Leu Val Leu Leu Tyr Arg Arg Leu  
 65 70 75 80  
 Leu Pro Pro Phe Ile Asn Val Met Ser Leu Ala Val Ala Pro Leu Gly  
 85 90 95  
 Gly Leu Ile Gly Leu Trp Leu Thr Asn Thr Pro Ile Ser Met Pro Val  
 100 105 110  
 Tyr Ile Gly Leu Ile Met Leu Leu Gly Ile Val Ala Lys Asn  
 115 120 125

<210> 2457  
 <211> 754  
 <212> DNA  
 <213> Homo sapiens

<400> 2457  
 cctaggaatt taccaccatc aaagacttac attaaccagc tatccatgaa ctcacctgag  
 60  
 atgagcgaat gtgacatctt gcacactctg cgatgggtctt ctgggtccg gatcagctcc  
 120  
 tatgtcaact ggataaagga tcaccttatt aaacagggaa tgaaggctga gcatgctagc  
 180  
 tcgcttctag aactggcatc caccactaag tgtagctcag tgaaatatga tgttgaaata  
 240  
 gtagaggaat acttcgctcg acagatctca tccttctgta gtatcgactg tgccaccatc  
 300  
 ttgcagctgc atgaaattcc cagtctgcag tccatctaca cccttgatgc cgcgattcta  
 360  
 aaaggcccg gtctttttgg gatgagcatt tttctaagat ggctgctgag actgacctc  
 420  
 ataagtcgctc tgagattacc aagaacctac ttccagccac gctgcaactc attgacacct  
 480  
 atgcatcggt caccagagcc tatttgctgc aaaactttta tgaagaggga acaactgaga  
 540  
 aaccttccaa ggagaaactg caaggctttg ctgctgtttt ggctattggc tctagcaggt  
 600  
 gcaaggcaaa tactctgggt ccgacactgg ttcagaattt gccatcgta gtgcagactg  
 660  
 tgtgtgagtc ctggaacaac atcaatacca atgaatttcc caatattgga tcctggcgca  
 720  
 atgcctttgc caatgacacc atcccttcac gcgt  
 754

<210> 2458

<211> 236

<212> PRT

<213> Homo sapiens

<400> 2458  
 Met Asn Ser Pro Glu Met Ser Glu Cys Asp Ile Leu His Thr Leu Arg  
 1 5 10 15  
 Trp Ser Ser Arg Leu Arg Ile Ser Ser Tyr Val Asn Trp Ile Lys Asp  
 20 25 30  
 His Leu Ile Lys Gln Gly Met Lys Ala Glu His Ala Ser Ser Leu Leu  
 35 40 45  
 Glu Leu Ala Ser Thr Thr Lys Cys Ser Ser Val Lys Tyr Asp Val Glu  
 50 55 60  
 Ile Val Glu Glu Tyr Phe Ala Arg Gln Ile Ser Phe Cys Ser Ile  
 65 70 75 80  
 Asp Cys Ala Thr Ile Leu Gln Leu His Glu Ile Pro Ser Leu Gln Ser  
 85 90 95  
 Ile Tyr Thr Leu Asp Ala Ala Ile Leu Lys Gly Pro Gly Leu Phe Gly  
 100 105 110  
 Met Ser Ile Phe Leu Arg Trp Leu Leu Arg Leu Ile Leu Ile Ser Arg  
 115 120 125  
 Leu Arg Leu Pro Arg Thr Tyr Phe Gln Pro Arg Cys Asn Ser Leu Thr  
 130 135 140  
 Pro Met His Arg Ser Pro Glu Pro Ile Cys Cys Lys Thr Leu Met Lys

```

145          150          155          160
Arg Glu Gln Leu Arg Asn Leu Pro Arg Arg Asn Cys Lys Ala Leu Leu
          165          170          175
Leu Phe Trp Leu Leu Ala Leu Ala Gly Ala Arg Gln Ile Leu Trp Val
          180          185          190
Arg His Trp Phe Arg Ile Cys His Arg Gln Cys Arg Leu Cys Val Ser
          195          200          205
Pro Gly Thr Thr Ser Ile Pro Met Asn Phe Pro Ile Leu Asp Pro Gly
          210          215          220
Ala Met Pro Leu Pro Met Thr Pro Ser Leu His Ala
225          230          235

```

&lt;210&gt; 2459

&lt;211&gt; 382

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2459

```

accggtgcac agatcgcttct ggccgcgtgc actgccccgc tcaagcaaat cgctatcaac
60
gctggtcttg agggcgccgt cgtggctgag aaggctcgctg gtctgccccg aggacagggc
120
ctcaacgcgg ccaatgacga gtatgtcgac atggtagagg ccggcatcat tgacccggcc
180
aagggtgaccc gttcggtctct gcagaacgcc gcgtccatcg cggccctggt cctcaccact
240
gaagccgtca tcgctgacaa gcccgagcct gttaaggtc ccgctggcgg cggtgatatg
300
gacggtatgg gtggcatggg cggcatgatg tgatcgtgta ttgcottcgc tgatttgagt
360
gggatgccac ttgccccag gc
382

```

&lt;210&gt; 2460

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2460

```

Thr Gly Ala Gln Ile Val Leu Ala Ala Cys Thr Ala Pro Leu Lys Gln
1          5          10          15
Ile Ala Ile Asn Ala Gly Leu Glu Gly Gly Val Val Ala Glu Lys Val
          20          25          30
Ala Gly Leu Pro Ala Gly Gln Gly Leu Asn Ala Ala Asn Asp Glu Tyr
          35          40          45
Val Asp Met Val Glu Ala Gly Ile Ile Asp Pro Ala Lys Val Thr Arg
          50          55          60
Ser Ala Leu Gln Asn Ala Ala Ser Ile Ala Ala Leu Phe Leu Thr Thr
65          70          75          80
Glu Ala Val Ile Ala Asp Lys Pro Glu Pro Val Lys Ala Pro Ala Gly
          85          90          95
Gly Gly Asp Met Asp Gly Met Gly Gly Met Gly Gly Met Met
100          105          110

```

<210> 2461  
 <211> 558  
 <212> DNA  
 <213> Homo sapiens

<400> 2461  
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 60  
 tgcaatgctg tttgtcgtca tgctcggggg caagcaccca cgggctaaaa tcgaaattca  
 120  
 cgatgtggta ttcgcagtcg cggatagcgt gcaacacacc tacaccaat tgcgcgacgg  
 180  
 ctgggttcggc agccctaagg tgtgcatatc gatgcgtgga tggccgtcga tggcgtcgac  
 240  
 ggctggaaaag tcgaactcag ccagatggcg ccgcctgccg acgcgcatca cctgtacttc  
 300  
 atcaacctcg cgggctacga ggccaacgct tttggcgagg cccatcatta cctgctggtg  
 360  
 gtcgccccggg acaaacagga agccaagcgc aaggggcagc ggcaaatgtt gcaacactgg  
 420  
 tcccaggccc acaccgatgg cgtaatggat atcgacgact gcttgccgat tgatctggtg  
 480  
 gacggtcgct atgttcacct ggtgcaaggc ccgcaccagc cgatcatcca gcacaacgac  
 540  
 tacatcatcc tgccgcga  
 558

<210> 2462  
 <211> 148  
 <212> PRT  
 <213> Homo sapiens

<400> 2462  
 Met Val Ser Leu Phe Gln Val Ala Arg Thr Asp Leu Gln Cys Cys Leu  
 1 5 10 15  
 Ser Ser Cys Ser Gly Ala Ser Thr His Gly Leu Lys Ser Lys Phe Thr  
 20 25 30  
 Met Trp Tyr Ser Gln Ser Arg Ile Arg Cys Asn Thr Pro Thr Pro Asn  
 35 40 45  
 Cys Ala Thr Ala Gly Ser Ala Ala Leu Arg Cys Ala Tyr Arg Cys Val  
 50 55 60  
 Asp Gly Arg Arg Trp Arg Arg Arg Leu Glu Ser Arg Thr Gln Pro Asp  
 65 70 75 80  
 Gly Ala Ala Cys Arg Arg Ala Ser Pro Val Leu His Gln Pro Arg Arg  
 85 90 95  
 Leu Arg Gly Gln Arg Phe Trp Arg Gly Pro Ser Leu Pro Ala Gly Gly  
 100 105 110  
 Arg Pro Gly Gln Thr Gly Ser Gln Ala Gln Gly Ala Ala Ala Asn Val  
 115 120 125  
 Ala Thr Leu Val Pro Gly Pro His Arg Trp Arg Asn Gly Tyr Arg Arg  
 130 135 140  
 Leu Leu Ala Asp  
 145

<210> 2463  
 <211> 333  
 <212> DNA  
 <213> Homo sapiens

<400> 2463  
 cccagggggt aagccatgag cctgttgagc caagtggccc gggcgccgtt gagcgccaag  
 60  
 ttccggcctgc tgattattct gttatacgtc gcgctggcgc tgtgngcgcc gctgctggcg  
 120  
 ccctatggcg aaaccaggt ggtgggtgaa ggcttcgcgc cgtggagcgg ccagtttttg  
 180  
 ctgggcaccg ataacctggg gcgcgacatg ttcagccgcc tgatgtacgg cgcgcgcaat  
 240  
 accttgggca ttgccttctc gacgacgacg ctggcggttc tgctcggtgg tttgagcggg  
 300  
 ttggtcgcgg cgatcaaggg cggttgggtc gac  
 333

<210> 2464  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens

<400> 2464  
 Met Ser Leu Leu Ser Gln Val Ala Arg Ala Pro Leu Ser Ala Lys Phe  
 1 5 10 15  
 Gly Leu Leu Ile Ile Leu Leu Tyr Val Ala Leu Ala Leu Xaa Ala Pro  
 20 25 30  
 Leu Leu Ala Pro Tyr Gly Glu Thr Gln Val Val Gly Glu Gly Phe Ala  
 35 40 45  
 Pro Trp Ser Gly Gln Phe Leu Leu Gly Thr Asp Asn Leu Gly Arg Asp  
 50 55 60  
 Met Phe Ser Arg Leu Met Tyr Gly Ala Arg Asn Thr Leu Gly Ile Ala  
 65 70 75 80  
 Phe Leu Thr Thr Thr Leu Ala Phe Leu Leu Gly Gly Leu Ser Gly Leu  
 85 90 95  
 Val Ala Ala Ile Lys Gly Gly Trp Val Asp  
 100 105

<210> 2465  
 <211> 434  
 <212> DNA  
 <213> Homo sapiens

<400> 2465  
 nntcatgagg acatttcctt catatttggg ggtggtaaat ccctcctggg acacggggaa  
 60  
 atgaccagag gctggcgccc cacctggcag gaacagatgc cagctctgct gcagccatcg  
 120  
 ccccttgagc ggggtggtct gtgcctcttt ctgcactgct ggtgggtggg gctgttggct  
 180  
 ggggtgatga taccggctgc cagagatggc tcaggtgccg gctgctgggc tatctcaggc  
 240

actggctgct gggctatctc ggggtgccggc tgctgggcta tctcaggcgc tggctgctgc  
 300  
 tgggctgtct cgggtgctgg ctgttgggac gtctcctgtc ctggcactgg gctctcgggt  
 360  
 gctgggtgcc agctgctgcc taccttgcaac tgggctctgg gcactcactg cactcgggct  
 420  
 tttccatctc cgac  
 434

<210> 2466

<211> 82

<212> PRT

<213> Homo sapiens

<400> 2466

Trp	Ile	Pro	Ala	Ala	Arg	Asp	Gly	Ser	Gly	Ala	Ser	Cys	Trp	Ala	Ile
1				5					10				15		
Ser	Gly	Thr	Gly	Cys	Trp	Ala	Ile	Ser	Gly	Ala	Gly	Cys	Trp	Ala	Ile
			20				25					30			
Ser	Gly	Ala	Gly	Cys	Cys	Trp	Ala	Val	Ser	Gly	Ala	Gly	Cys	Trp	Asp
		35				40					45				
Val	Ser	Cys	Pro	Gly	Thr	Gly	Leu	Ser	Gly	Ala	Gly	Cys	Gln	Leu	Leu
	50				55					60					
Pro	Thr	Leu	His	Trp	Ala	Leu	Gly	Thr	His	Cys	Thr	Arg	Ala	Phe	Pro
65					70					75				80	
Ser	Pro														

<210> 2467

<211> 306

<212> DNA

<213> Homo sapiens

<400> 2467

atggactcca ccggcaccgg agcagggggg aaggggaaga agggagcggc cgggcgcaag  
 60  
 gtcggcgggc caaggaagaa gtcgggtgtcg aggtccgtga aggccgggtct ccagttcccc  
 120  
 gtcggcgcga tcgggcgcta cttgaagaag ggccgctacg cgcagcgtgt cggcaccggc  
 180  
 gccccgtct acctcgccgc tgtcctcgaa tacctcgccg ctgaggttct ggagctcgcc  
 240  
 ggtaatgctg ccagggacaa caagaagact cgcattattc cgcgccacgt gcttctggcg  
 300  
 atccgg  
 306

<210> 2468

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2468

Met Asp Ser Thr Gly Thr Gly Ala Gly Gly Lys Gly Lys Lys Gly Ala

```

      1           5           10           15
Ala Gly Arg Lys Val Gly Gly Pro Arg Lys Lys Ser Val Ser Arg Ser
      20           25           30
Val Lys Ala Gly Leu Gln Phe Pro Val Gly Arg Ile Gly Arg Tyr Leu
      35           40           45
Lys Lys Gly Arg Tyr Ala Gln Arg Val Gly Thr Gly Ala Pro Val Tyr
      50           55           60
Leu Ala Ala Val Leu Glu Tyr Leu Ala Ala Glu Val Leu Glu Leu Ala
      65           70           75           80
Gly Asn Ala Ala Arg Asp Asn Lys Lys Thr Arg Ile Ile Pro Arg His
      85           90           95
Val Leu Leu Ala Ile Arg
      100

```

&lt;210&gt; 2469

&lt;211&gt; 489

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2469

```

gccggcgtgg cacatggcct ccctgaagcc agcattgccc tggccaagga agctttgcag
60
aacagatgag atttcagctg ggacttgcag ccaagtggga tttggccttt tggggagaag
120
ggaaagggca ttcaaaggcc agggacagag tatgggtcaa ggcatggaga tgaggaagag
180
gggaccagag cagaggggtca ggttggaaag cgagttgggg tcaatctgca aaggggctga
240
cgtgccaggt aaaaaacagg agcacagttt agttttgtcg gatcatttca ggtggaaggg
300
cagtgggaat gttggagaaa acactttttg gtgtcgttac attgaatctg ctcatctata
360
agaataaaaac tttatttcat agagttattg tatggctcaa aataggtatg aagaattaag
420
aaaaagaatt ttagatttaa aatgaaaagg cacctacaaa agtagagtgg tagagttacc
480
aacgtggag
489

```

&lt;210&gt; 2470

&lt;211&gt; 115

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2470

```

Met Ala Ser Leu Lys Pro Ala Leu Pro Trp Pro Arg Lys Leu Cys Arg
      1           5           10           15
Thr Asp Glu Ile Ser Ala Gly Thr Cys Ser Gln Val Gly Phe Gly Leu
      20           25           30
Leu Gly Arg Arg Glu Arg Ala Phe Lys Gly Gln Gly Gln Ser Met Val
      35           40           45
Lys Gly Met Glu Met Arg Lys Arg Gly Pro Glu Gln Arg Val Arg Leu
      50           55           60
Glu Ser Glu Leu Gly Ser Ile Cys Lys Gly Ala Asp Val Pro Gly Lys

```



[illegible]

```
<210> 2471
<211> 779
<212> DNA
<213> Homo sapiens
```

```

<400> 2471
tggccatcct cctgacatg tacacttcca atatgccggt gtttgagccg ttcatatagtc
60
ctcacatggt ggcccttgac ttctttcaca gtgaggacct ctgcttcatg aggctcataa
120
gaagaggagc taaggactat tttgtcatg gggcgccaat ccactgcac tttactata
180
attctctcat ttcttgaggc aatatcagct ccaagatgtg tccaggagtt cttaggataa
240
gcactgtaaa gatgaacttt ccataaacc ccaattgttc ctgggtcaat atgaattcca
300
ttcatacggt cacaaaagac tccctctgag gctctaagga gaatcagaag cttttgttcc
360
ttttctaagg gattttctaa agtaccaact ttcagctccc cgcttgaat gaccatgcat
420
gccacactca gaacattgct tctgtccaca gggaagtcta aggtcccat cacatacagc
480
cctttgaaga attggaaaat ctgtatccac aaggacagtt ctgttgggta aaatgagaac
540
gtcatcccca gggcctggaa tggattgtt gtatcctccc cagccttctt caacaccttg
600
ccatgtttca gggagggacc attttaaagc tgattcaggg gcagaggtag aagctgaat
660
agttgggggc ataccttctt tcacccggag aatgacttga acttggcctt cacctaaaac
720
cagataggtg agttgcctca gctggctatt gaagaaccag tcacagcctt ggttctggc
779

```

```
<210> 2472
<211> 181
<212> PRT
<213> Homo sapiens
```

```

<400> 2472
Met Thr Phe Ser Phe Tyr Pro Thr Glu Leu Ser Leu Trp Ile Gln Ile
 1          5          10
Phe Gln Phe Phe Lys Gly Leu Tyr Val Met Gly Thr Leu Asp Phe Pro
          20          25          30
Val Asp Arg Ser Asn Val Leu Ser Val Ala Cys Met Val Ile Ala Gly
          35          40          45
Gly Glu Leu Lys Val Gly Thr Leu Glu Asn Pro Leu Glu Lys Glu Gln

```

50                      55                      60  
 Lys Leu Leu Ile Leu Leu Arg Ala Ser Glu Gly Val Phe Cys Asp Arg  
 65                      70                      75                      80  
 Met Asn Gly Ile His Ile Asp Pro Gly Thr Ile Gly Val Tyr Gly Lys  
                     85                      90                      95  
 Val His Leu Tyr Ser Ala Tyr Pro Lys Asn Ser Trp Thr His Leu Gly  
                     100                      105                      110  
 Ala Asp Ile Ala Ser Gly Asn Glu Arg Ile Ile Val Glu Asp Ala Val  
                     115                      120                      125  
 Asp Trp Arg Pro His Asp Lys Ile Val Leu Ser Ser Ser Tyr Glu  
                     130                      135                      140  
 Pro His Glu Ala Glu Val Leu Thr Val Lys Glu Val Lys Gly His His  
 145                      150                      155                      160  
 Val Arg Ile Tyr Glu Arg Leu Lys His Arg His Ile Gly Ser Val His  
                     165                      170                      175  
 Val Thr Glu Asp Gly  
                     180

<210> 2473  
 <211> 698  
 <212> DNA  
 <213> Homo sapiens

<400> 2473  
 nngtgcacca agaaatggca gcctgacaag ctggtggtgg tatggactcg gcggaaccga  
 60  
 cgcatctgct ccaaggccca cagctggcag ccgnnngcat ccagaaccca taccggggca  
 120  
 ccgtggtgtg gatggtacnc tgagaatgtg gacatctctg tgacctcta cagggacccc  
 180  
 cacgtggacc agtatgaggg caaagagtgg acatttatta ttgaaaatga gtctaagggg  
 240  
 cagcgaagg tgctggccac ggccgaggtg gacctggccc gccatgccag ggcccgtgcc  
 300  
 ntgtccaagt ccnactgag gctgcggctg aagccaaagt cagtgaagac ggtgcaggct  
 360  
 gagctgagcc tcactctttc cggggtgctg ctgcgggagg gccgtgccac ggacgatgac  
 420  
 atgcagagtc tcgcaagcct catgagtgtg aagcctagt atgtgggcaa cttggatgac  
 480  
 tttgctgaga gtgatgaaga tgaggctcat ggcccaggag ccccgaggc ccgggctcga  
 540  
 gtccccagc caggtgggct cacagcctgc tgtggatcga gactgccaag acctggggag  
 600  
 ggagggttac ccgggccacc agccactgc tgtgcccgc ctgtgatggg aactcattac  
 660  
 tgcccaggca gtcccaacca acccagcag ctcaattg  
 698

<210> 2474  
 <211> 232  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 2474

Xaa Cys Thr Lys Lys Trp Gln Pro Asp Lys Leu Val Val Val Trp Thr  
 1 5 10 15  
 Arg Arg Asn Arg Arg Ile Cys Ser Lys Ala His Ser Trp Gln Pro Xaa  
 20 25 30  
 Ala Ser Arg Thr His Thr Gly Ala Pro Trp Cys Gly Trp Tyr Xaa Glu  
 35 40 45  
 Asn Val Asp Ile Ser Val Thr Leu Tyr Arg Asp Pro His Val Asp Gln  
 50 55 60  
 Tyr Glu Ala Lys Glu Trp Thr Phe Ile Ile Glu Asn Glu Ser Lys Gly  
 65 70 75 80  
 Gln Arg Lys Val Leu Ala Thr Ala Glu Val Asp Leu Ala Arg His Ala  
 85 90 95  
 Arg Ala Arg Ala Xaa Ser Lys Ser Xaa Leu Arg Leu Arg Leu Lys Pro  
 100 105 110  
 Lys Ser Val Lys Thr Val Gln Ala Glu Leu Ser Leu Thr Leu Ser Gly  
 115 120 125  
 Val Leu Leu Arg Glu Gly Arg Ala Thr Asp Asp Asp Met Gln Ser Leu  
 130 135 140  
 Ala Ser Leu Met Ser Val Lys Pro Ser Asp Val Gly Asn Leu Asp Asp  
 145 150 155 160  
 Phe Ala Glu Ser Asp Glu Asp Glu Ala His Gly Pro Gly Ala Pro Glu  
 165 170 175  
 Ala Arg Ala Arg Val Pro Gln Pro Gly Gly Leu Thr Ala Cys Cys Gly  
 180 185 190  
 Ser Arg Leu Pro Arg Pro Gly Glu Gly Leu Pro Gly Pro Pro Ala  
 195 200 205  
 Thr Cys Cys Ala Arg Pro Val Met Gly Thr His Tyr Cys Pro Gly Ser  
 210 215 220  
 Pro Asn Gln Pro Ser Ser Leu Asn  
 225 230

&lt;210&gt; 2475

&lt;211&gt; 1251

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2475

ngcgcgcccc agatgcaggt gagcaagagg atgctggcgg ggggcgtgag gagcatgccc  
 60  
 agccccctcc tggcctgctg gcagcccatc ctctgctgg tgctgggctc agtgctgtca  
 120  
 ggctcggcca cgggctgccc gccccgctgc gagtgtctcg cccaggaccg cgctgtgtctg  
 180  
 tgccaccgca agcgctttgt ggcagtcctc gagggcatcc ccaccgagac gcgcctgctg  
 240  
 gacctaggca agaaccgcat caaaacgctc aaccaggacg agttcgccag cttcccgcac  
 300  
 ctggaggagc tggagctcaa cgagaacatc gtgagcgccg tggagcccgg cgccttcaac  
 360  
 aacctcttca acctccggac gctgggtctc cgcagcaacc gcctgaagct catcccgtta  
 420  
 ggctgtctta ctggcctcag caacctgacc aagctggaca tcagcgagaa caagatcggt  
 480

atcctactgg actacatgtt tcaggacctg tacaacctca agtcactgga ggttggcgac  
 540  
 aatgacctcg tctacatctc tcacccgccc ttcagcggcc tcaacagcct ggagcagctg  
 600  
 acgctggaga aatgcaacct gacctccatc cccaccgagg cgctgtccca cctgcacggc  
 660  
 ctcatcgctc tgaggctccg gcacctcaac atcaatgccca tccgggacta ctccctcaag  
 720  
 aggtctgtacc gactcaaggt cttggagatc tcccactggc cctacttgga caccatgaca  
 780  
 cccaactgcc tctacggcct caacctgacg tccctgtcca tcacacactg caatctgacc  
 840  
 gctgtgcctt acctggccgt ccgccacctc gtctatcttc gcttcctcaa cctctcctac  
 900  
 aaccccatca gcaccattga gggctccatg ttgcatgagc tgctccggct gcaggagatc  
 960  
 cagctgggtg ggcgggcagct ggccgggtgg agccctgcct tccgcgccct caactacctg  
 1020  
 cgctgtctca atgtctctgg caaccagctg accacactgg aggaatcagt cttccactcg  
 1080  
 gtgggcaacc tggagacact catcctggac tccaacccgc tggcctgcga ctgtcggtc  
 1140  
 ctgtgggtgt tccggcgccc tggcctacaa acttcaaccg gcagcagccc acgtgcgcca  
 1200  
 cgcccagatt tgtccagggg caaggagtgc aaggacttcc ctgatgtgct a  
 1251

<210> 2476

<211> 417

<212> PRT

<213> Homo sapiens

<400> 2476

Xaa	Ala	Pro	Glu	Met	Gln	Val	Ser	Lys	Arg	Met	Leu	Ala	Gly	Gly	Val
1				5					10					15	
Arg	Ser	Met	Pro	Ser	Pro	Leu	Leu	Ala	Cys	Trp	Gln	Pro	Ile	Leu	Leu
			20						25					30	
Leu	Val	Leu	Gly	Ser	Val	Leu	Ser	Gly	Ser	Ala	Thr	Gly	Cys	Pro	Pro
			35						40					45	
Arg	Cys	Glu	Cys	Ser	Ala	Gln	Asp	Arg	Ala	Val	Leu	Cys	His	Arg	Lys
			50						55					60	
Arg	Phe	Val	Ala	Val	Pro	Glu	Gly	Ile	Pro	Thr	Glu	Thr	Arg	Leu	Leu
Asp	Leu	Gly	Lys	Asn	Arg	Ile	Lys	Thr	Leu	Asn	Gln	Asp	Glu	Phe	Ala
Ser	Phe	Pro	His	Leu	Glu	Glu	Leu	Glu	Leu	Asn	Glu	Asn	Ile	Val	Ser
Ala	Val	Glu	Pro	Gly	Ala	Phe	Asn	Asn	Leu	Phe	Asn	Leu	Arg	Thr	Leu
Gly	Leu	Arg	Ser	Asn	Arg	Leu	Lys	Leu	Ile	Pro	Leu	Gly	Val	Phe	Thr
Gly	Leu	Ser	Asn	Leu	Thr	Lys	Leu	Asp	Ile	Ser	Glu	Asn	Lys	Ile	Val
Ile	Leu	Leu	Asp	Tyr	Met	Phe	Gln	Asp	Leu	Tyr	Asn	Leu	Lys	Ser	Leu

165 170 175  
 Glu Val Gly Asp Asn Asp Leu Val Tyr Ile Ser His Arg Ala Phe Ser  
 180 185 190  
 Gly Leu Asn Ser Leu Glu Gln Leu Thr Leu Glu Lys Cys Asn Leu Thr  
 195 200 205  
 Ser Ile Pro Thr Glu Ala Leu Ser His Leu His Gly Leu Ile Val Leu  
 210 215 220  
 Arg Leu Arg His Leu Asn Ile Asn Ala Ile Arg Asp Tyr Ser Phe Lys  
 225 230 235 240  
 Arg Leu Tyr Arg Leu Lys Val Leu Glu Ile Ser His Trp Pro Tyr Leu  
 245 250 255  
 Asp Thr Met Thr Pro Asn Cys Leu Tyr Gly Leu Asn Leu Thr Ser Leu  
 260 265 270  
 Ser Ile Thr His Cys Asn Leu Thr Ala Val Pro Tyr Leu Ala Val Arg  
 275 280 285  
 His Leu Val Tyr Leu Arg Phe Leu Asn Leu Ser Tyr Asn Pro Ile Ser  
 290 295 300  
 Thr Ile Glu Gly Ser Met Leu His Glu Leu Leu Arg Leu Gln Glu Ile  
 305 310 315 320  
 Gln Leu Val Gly Gly Gln Leu Ala Gly Trp Ser Pro Ala Phe Arg Gly  
 325 330 335  
 Leu Asn Tyr Leu Arg Val Leu Asn Val Ser Gly Asn Gln Leu Thr Thr  
 340 345 350  
 Leu Glu Glu Ser Val Phe His Ser Val Gly Asn Leu Glu Thr Leu Ile  
 355 360 365  
 Leu Asp Ser Asn Pro Leu Ala Cys Asp Cys Arg Leu Leu Trp Val Phe  
 370 375 380  
 Arg Arg Arg Gly Leu Gln Thr Ser Thr Gly Ser Ser Pro Arg Ala Pro  
 385 390 395 400  
 Arg Pro Ser Leu Ser Arg Gly Lys Glu Phe Lys Asp Phe Pro Asp Val  
 405 410 415  
 Leu

<210> 2477  
 <211> 548  
 <212> DNA  
 <213> Homo sapiens

<400> 2477  
 nagactgcga tcagacgcgc gtgccagct gaaccagggtg cgtgagaagg ctgccttcag  
 60  
 gtggccgggg gctccctcca gctgtctctg gacggaggga cgggaagtgg ccagaagggg  
 120  
 aagtgtgagg agttcccgtc cagcctgtca tcagtctccc caggctcttga agcggcgggc  
 180  
 ctgctcctgg ccgtgacctt ggaccctctg gagaccctta tcaaggatgg catcctctac  
 240  
 cagcagcatg tcaagtttgg caagaagtgc tggcggaagg tgtgggctct gctgtatgca  
 300  
 ggaggcccat caggcgtggc acggctggag aactgggagg tccgggatgg tggcctggga  
 360  
 gcagcgggtg acaggtcggc ggggcctggc cggcgagggg agcgacgggt catccgctg  
 420

gctgactgtg tgtccgtgct gccggctgac ggcgagagct gcccccgga caccggtgcc  
 480  
 ttctgtctca ccaccaccga gcgaagccat ctactggctg ctcagcaccg ccaggcctgg  
 540  
 atggggccc  
 548

<210> 2478<211> 113  
 <212> PRT  
 <213> Homo sapiens

<400> 2478  
 Leu Glu Thr Pro Ile Lys Asp Gly Ile Leu Tyr Gln Gln His Val Lys  
 1 5 10 15  
 Phe Gly Lys Lys Cys Trp Arg Lys Val Trp Ala Leu Leu Tyr Ala Gly  
 20 25 30  
 Gly Pro Ser Gly Val Ala Arg Leu Glu Asn Trp Glu Val Arg Asp Gly  
 35 40 45  
 Gly Leu Gly Ala Ala Gly Asp Arg Ser Ala Gly Pro Gly Arg Arg Gly  
 50 55 60  
 Glu Arg Arg Val Ile Arg Leu Ala Asp Cys Val Ser Val Leu Pro Ala  
 65 70 75 80  
 Asp Gly Glu Ser Cys Pro Arg Asp Thr Gly Ala Phe Leu Leu Thr Thr  
 85 90 95  
 Thr Glu Arg Ser His Leu Leu Ala Ala Gln His Arg Gln Ala Trp Met  
 100 105 110  
 Gly

<210> 2479  
 <211> 324  
 <212> DNA  
 <213> Homo sapiens

<400> 2479  
 gaattcatgg aggtctatga ggaggatgaa gaatatgcgt atgaaaaata tgaaacccat  
 60  
 ttccggcacga gctggatgga ggagaccgca ggcacettct cactgaactg gtatcgcagc  
 120  
 aggtactgga atgacaatga agcagcagaa aggcttgctg tgatgtgggc taaaaccttc  
 180  
 aaatatgcgt cgataaacgt ctctctggcag accgggatta gcaatagcga cgacgagggc  
 240  
 aatgaagatg aagacatggt ctacgccggt atctccattc cgctgggagg cggggcgtag  
 300  
 tctaactcct ggtatcgtga atat  
 324

<210> 2480  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

<400> 2480

Glu Phe Met Glu Val Tyr Glu Glu Asp Glu Glu Tyr Ala Tyr Glu Lys  
 1 5 10 15  
 Tyr Glu Thr His Phe Gly Thr Ser Trp Met Glu Glu Thr Ala Gly Thr  
 20 25 30  
 Phe Ser Leu Asn Trp Tyr Arg Ser Arg Tyr Trp Asn Asp Asn Glu Ala  
 35 40 45  
 Ala Glu Arg Leu Ala Leu Met Trp Ala Lys Thr Phe Lys Tyr Ala Ser  
 50 55 60  
 Ile Asn Val Ser Trp Gln Thr Gly Ile Ser Asn Ser Asp Asp Glu Gly  
 65 70 75 80  
 Asn Glu Asp Glu Asp Met Phe Tyr Ala Gly Ile Ser Ile Pro Leu Gly  
 85 90 95  
 Gly Gly Ala Tyr Ser Asn Ser Trp Tyr Arg Glu Tyr  
 100 105

&lt;210&gt; 2481

&lt;211&gt; 484

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2481

gcgttcacta acgcttcaac aaactcttac aagcgtcttg ttcttggttt cgaagcacct  
 60  
 gttatgttgg cttactcagc tcgtaaccgt tctgcttcta tccgtatccc atacgttgca  
 120  
 agccctaaag gcaagcgtat tgaagctcgt ttccctgac caaccgctaa cccataccta  
 180  
 gcattttcag ctatgttgat ggctgggtatc gatggtatca aaaacaagat tcaccctggc  
 240  
 gatgcagcag acaaagattt gtacgacctt ccagctgaag aagcagccgc tatccctcaa  
 300  
 gttgctagca gcttagaaga agcgttaag tgcctagatc aagaccgtga gttcttgact  
 360  
 caagtggtgcg ttttctctga cgacatgac gatgcttaca tcgctcttaa agcagaagaa  
 420  
 gcacagcgtg ttgcaatgac aacaacacca cttgagttcg aactttacta cagcctataa  
 480  
 gctt  
 484

&lt;210&gt; 2482

&lt;211&gt; 159

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2482

Ala Phe Thr Asn Ala Ser Thr Asn Ser Tyr Lys Arg Leu Val Pro Gly  
 1 5 10 15  
 Phe Glu Ala Pro Val Met Leu Ala Tyr Ser Ala Arg Asn Arg Ser Ala  
 20 25 30  
 Ser Ile Arg Ile Pro Tyr Val Ala Ser Pro Lys Gly Lys Arg Ile Glu  
 35 40 45  
 Ala Arg Phe Pro Asp Pro Thr Ala Asn Pro Tyr Leu Ala Phe Ser Ala  
 50 55 60

Met Leu Met Ala Gly Ile Asp Gly Ile Lys Asn Lys Ile His Pro Gly  
 65 70 75 80  
 Asp Ala Ala Asp Lys Asp Leu Tyr Asp Leu Pro Ala Glu Glu Ala Ala  
 85 90 95  
 Ala Ile Pro Gln Val Ala Ser Ser Leu Glu Glu Ala Leu Lys Cys Leu  
 100 105 110  
 Asp Gln Asp Arg Glu Phe Leu Thr Gln Gly Gly Val Phe Ser Asp Asp  
 115 120 125  
 Met Ile Asp Ala Tyr Ile Ala Leu Lys Ala Glu Glu Ala Gln Arg Val  
 130 135 140  
 Ala Met Thr Thr Thr Pro Leu Glu Phe Glu Leu Tyr Tyr Ser Leu  
 145 150 155

<210> 2483

<211> 477

<212> DNA

<213> Homo sapiens

<400> 2483

acgcgtgtta gccaaatctt ggttcctccc gttctctcct tacccgagcc tgaggccctt  
 60  
 ctggagaaca ggcagcctct gaggaaacct ctgatccccc atcagccacc ccatcgccctg  
 120  
 cgtccccagc cgtctctccc tggccttggt cccctctccc tgtgaaggag agaacagttt  
 180  
 cggctggccc tgagatgctg gcaggcctgc agtcagggca gtgggcgccct cccaccttga  
 240  
 aatggctcctt cgtgggtcag ttctgcttac ggggtagact ttgttgcctt ccacagagga  
 300  
 cagttagggg gggcaggaag gaagtctctg ccacaagtct gcattccagg ctgtttccag  
 360  
 aagtgggaat tctctcgtgc cctggagtct gggaatgcat ttttagtttc ccagcttcag  
 420  
 gtagaattga aattgagtga gccaacccac cacatccatc tggagccagg aactagt  
 477

<210> 2484

<211> 130

<212> PRT

<213> Homo sapiens

<400> 2484

Met His Ser Gln Thr Pro Gly His Glu Arg Ile Pro Thr Ser Gly Asn  
 1 5 10 15  
 Ser Leu Glu Cys Arg Leu Val Ala Glu Thr Ser Phe Leu Pro Thr Leu  
 20 25 30  
 Thr Val Leu Cys Gly Arg Gln Gln Ser Leu Pro Arg Lys Gln Asn Cys  
 35 40 45  
 Thr Thr Lys Asp His Phe Lys Val Gly Gly Ala His Cys Pro Asp Cys  
 50 55 60  
 Arg Pro Ala Ser Ile Ser Gly Pro Ala Glu Thr Val Leu Ser Phe Thr  
 65 70 75 80  
 Gly Lys Gly Glu Gln Gly Gln Glu Glu Ala Ala Gly Asp Ala Gly Asp  
 85 90 95



Gly Val Ala Asp Arg Gly Ser Glu Val Ser Ser Glu Ala Ala Cys Ser  
                   100                  105                  110  
 Pro Glu Gly Pro Gln Ala Arg Val Arg Arg Glu Arg Glu Glu Pro Arg  
           115                  120                  125  
 Phe Gly  
       130

<210> 2485

<211> 608

<212> DNA

<213> Homo sapiens

<400> 2485

accggtgagg cgaagtgcgg tggcaattac gcagcttcgc tgcgttccca gatcgatgcc  
 60  
 aagaccgcg actgcaacga ggtgctcttt gtcgatgcag ttgaacatcg ctggatcgag  
 120  
 gagctgggtg gtatgaactt catggccatc agcaaagacg gtcagctcgt ccccccgag  
 180  
 ctactgggca ccactctgcy tggcgtgacc cgcaagtcca ttctggaagt tgccccgac  
 240  
 ctcggtcttg aaccagtgga gcgcaagatc gatgttgacg agctccttga tggcgttcgc  
 300  
 tctggcgagt tcccgggaagt cttcgccctgt ggtaccgccc cggttggtcac accgatcggc  
 360  
 tctttcctag atggagatac cgacgtgaag gtctctgagc ccaccggaaa gaccacgatg  
 420  
 gagatccgtc gccgtctgct ggatatccag ttcggacgcy ctgaggacac ccatggctgg  
 480  
 ttgaagcgag tctgctgacg gcgtcgacga ccattggggc cgcccccaat gatgtgttca  
 540  
 cgatcgggct acgacggtgt cgatgacaat gtcttgccgc tggaagggtt gcccgacggt  
 600  
 gaacgcgt  
 608

<210> 2486

<211> 165

<212> PRT

<213> Homo sapiens

<400> 2486

Thr Gly Glu Ala Lys Cys Gly Gly Asn Tyr Ala Ala Ser Leu Arg Ser  
   1                  5                  10                  15  
 Gln Ile Asp Ala Lys Thr Arg Asp Cys Asn Glu Val Leu Phe Val Asp  
           20                  25                  30  
 Ala Val Glu His Arg Trp Ile Glu Leu Gly Gly Met Asn Phe Met  
           35                  40                  45  
 Ala Ile Ser Lys Asp Gly Gln Leu Val Thr Pro Glu Leu Ala Gly Thr  
           50                  55                  60  
 Ile Leu Arg Gly Val Thr Arg Lys Ser Ile Leu Glu Val Ala Pro Asp  
   65                  70                  75                  80  
 Leu Gly Leu Glu Pro Val Glu Arg Lys Ile Asp Val Asp Glu Leu Leu  
           85                  90                  95

Asp Gly Val Arg Ser Gly Glu Phe Pro Glu Val Phe Ala Cys Gly Thr  
                   100                  105                  110  
 Ala Ala Val Val Thr Pro Ile Gly Ser Phe Leu Asp Gly Asp Thr Asp  
                   115                  120                  125  
 Val Lys Val Ser Glu Pro Thr Gly Lys Thr Thr Met Glu Ile Arg Arg  
                   130                  135                  140  
 Arg Leu Leu Asp Ile Gln Phe Gly Arg Ala Glu Asp Thr His Gly Trp  
 145                  150                  155                  160  
 Leu Lys Arg Val Cys  
                   165

&lt;210&gt; 2487

&lt;211&gt; 339

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2487

nccccctcag gagagcagcc catggaaggt cccccccaag gggccctga gagccctgac  
 60  
 agtctgcaaa gaaaccagaa agagctccag ggcctcctga ccaggtgca agccctggag  
 120  
 aaggaggccg caagcagtgt ggacgtgcag gccctgcgga ggctctttga ggccgtgccc  
 180  
 cagctgggag ggggtgctcc tcaggctcct gctgcccacc aaaagcccga ggcctcagtg  
 240  
 gagcaggcct ttggggagct gacacgggtc agcacggaag ttgctcaact gaaggaacag  
 300  
 accttggtaa ggctgctgga cattgaagag gctgtgcac  
 339

&lt;210&gt; 2488

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2488

Xaa Pro Ser Gly Glu Gln Pro Met Glu Gly Pro Pro Gln Gly Ala Pro  
 1                  5                  10                  15  
 Glu Ser Pro Asp Ser Leu Gln Arg Asn Gln Lys Glu Leu Gln Gly Leu  
                   20                  25                  30  
 Leu Thr Gln Val Gln Ala Leu Glu Lys Glu Ala Ala Ser Ser Val Asp  
                   35                  40                  45  
 Val Gln Ala Leu Arg Arg Leu Phe Glu Ala Val Pro Gln Leu Gly Gly  
                   50                  55                  60  
 Ala Ala Pro Gln Ala Pro Ala Ala His Gln Lys Pro Glu Ala Ser Val  
 65                  70                  75                  80  
 Glu Gln Ala Phe Gly Glu Leu Thr Arg Val Ser Thr Glu Val Ala Gln  
                   85                  90                  95  
 Leu Lys Glu Gln Thr Leu Val Arg Leu Leu Asp Ile Glu Glu Ala Val  
                   100                  105                  110  
 His

&lt;210&gt; 2489

<211> 594  
 <212> DNA  
 <213> Homo sapiens

<400> 2489  
 nacgcgttct tcggactggc gacgatgctg atttctatcc cgacgggggt gaagctattt  
 60  
 aactggctgg tcaccatcta tcacggccgg gtgcgtatca ccagccaggt tctttggacc  
 120  
 ctgggcttca tggtagacctt cgcgatcggg ggcgatgacc gcgtactgct ggccatcccg  
 180  
 ggtgctgact tcgtactgca caacagcctg ttcggaattg ctacttcca caacgtgatc  
 240  
 atcggcggcg cagtattcgg ctacatcgca gggttcagct tctacttccc gaaagcgttc  
 300  
 ggcttcaagc tgcacgaaag ctggggcaag gctgcattct gggtctggat ctcgggcttc  
 360  
 ttcgtcgcgt tcatgccgct ctatgcactg gggttcatgg gcatgaccgg ttgtttgaac  
 420  
 gcccccccca ccctgagtg ggtcccgta cgtacgctg ccatggtcgg tgcactgatg  
 480  
 atcgtgtcgt gtatgcctg ccagttgatt cagctgtatg tcagcgtgcg tgatcgcaag  
 540  
 cagaacatgt gcgaatccgg cgacccatgg aatgcacaca ccctggaatg gtcg  
 594

<210> 2490  
 <211> 198  
 <212> PRT  
 <213> Homo sapiens

<400> 2490  
 Xaa Ala Phe Phe Gly Leu Ala Thr Met Leu Ile Ser Ile Pro Thr Gly  
 1 5 10 15  
 Val Lys Leu Phe Asn Trp Leu Val Thr Ile Tyr His Gly Arg Val Arg  
 20 25 30  
 Ile Thr Ser Gln Val Leu Trp Thr Leu Gly Phe Met Val Thr Phe Ala  
 35 40 45  
 Ile Gly Gly Met Thr Gly Val Leu Leu Ala Ile Pro Gly Ala Asp Phe  
 50 55 60  
 Val Leu His Asn Ser Leu Phe Gly Ile Ala His Phe His Asn Val Ile  
 65 70 75 80  
 Ile Gly Gly Ala Val Phe Gly Tyr Ile Ala Gly Phe Ser Phe Tyr Phe  
 85 90 95  
 Pro Lys Ala Phe Gly Phe Lys Leu His Glu Ser Trp Gly Lys Ala Ala  
 100 105 110  
 Phe Trp Phe Trp Ile Ser Gly Phe Phe Val Ala Phe Met Pro Leu Tyr  
 115 120 125  
 Ala Leu Gly Phe Met Gly Met Thr Arg Cys Leu Asn Ala Pro Pro Thr  
 130 135 140  
 Pro Glu Trp Val Pro Tyr Leu Tyr Val Ala Met Val Gly Ala Leu Met  
 145 150 155 160  
 Ile Ala Val Gly Ile Ala Cys Gln Leu Ile Gln Leu Tyr Val Ser Val  
 165 170 175

Arg Asp Arg Lys Gln Asn Met Cys Glu Ser Gly Asp Pro Trp Asn Ala  
 180 185 190  
 His Thr Leu Glu Trp Ser  
 195

<210> 2491  
 <211> 592  
 <212> DNA  
 <213> Homo sapiens

<400> 2491  
 acgcgtcacg caactgtcaa acttgccaat ccgcttgacg atactcgccc ctacctacgc  
 60  
 actacgttgt tgcctggctt attccatgca gtaacgacga atatgtcgcg atctcaggat  
 120  
 gatcttgcag tgttcgaaag cggaaactgta ttccgcgcgc tcaactccggc tgcggcacccg  
 180  
 cgtcccgggt tcgacgagcg cccctccgat gaagtccttg ccgagatcga cgccgccttg  
 240  
 ccagcccagc cgcgcgatgt cgcggccgtg atctgtggca gctggctgcc cgatcgctgg  
 300  
 gatggagagt cggtaaggc tgactggcga cacgctgtgc tggtcgccca gaaggctgct  
 360  
 gatgctcttg gcgtgaggt ggtgcgcaag gctgaccgtc aggtcccatg gcatcccggg  
 420  
 cgttgtgcgg ctctcatcgt cgatgggaag gtcattggcc atgctggtga gttgcacccc  
 480  
 acagtagtgt cgaaggctgg tctgcctcag cgcacctgtg cggtcgagtt caatctagat  
 540  
 gctttggtag cctgcgctcc gagcgggtgg gaggtcatgg ttatttcaag gt  
 592

<210> 2492  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 2492  
 Thr Arg His Ala Thr Val Lys Leu Ala Asn Pro Leu Asp Asp Thr Arg  
 1 5 10 15  
 Pro Tyr Leu Arg Thr Thr Leu Leu Pro Gly Leu Phe His Ala Val Thr  
 20 25 30  
 Thr Asn Met Ser Arg Ser Gln Asp Asp Leu Ala Val Phe Glu Ser Gly  
 35 40 45  
 Thr Val Phe Arg Ala Val Thr Pro Ala Ala Ala Pro Arg Pro Gly Val  
 50 55 60  
 Asp Glu Arg Pro Ser Asp Glu Val Leu Ala Glu Ile Asp Ala Ala Leu  
 65 70 75 80  
 Pro Ala Gln Pro Arg Met Leu Ala Ala Val Ile Cys Gly Ser Trp Leu  
 85 90 95  
 Pro Asp Arg Trp Asp Gly Glu Ser Val Lys Ala Asp Trp Arg His Ala  
 100 105 110  
 Val Leu Val Ala Gln Lys Ala Ala Asp Ala Leu Gly Val Arg Leu Val  
 115 120 125

Arg Lys Ala Asp Arg Gln Ala Pro Trp His Pro Gly Arg Cys Ala Ala  
 130 135 140  
 Leu Ile Val Asp Gly Lys Val Ile Gly His Ala Gly Glu Leu His Pro  
 145 150 155 160  
 Thr Val Val Ser Lys Ala Gly Leu Pro Gln Arg Thr Cys Ala Val Glu  
 165 170 175  
 Phe Asn Leu Asp Ala Leu Val Ala Cys Ala Pro Ser Gly Gly Glu Val  
 180 185 190  
 Met Val Ile Ser Arg  
 195

<210> 2493  
 <211> 418  
 <212> DNA  
 <213> Homo sapiens

<400> 2493  
 acgcgtcagg ttgccgtga tcgtgccacc gtcacctcca tgggtgccttc aggagcagac  
 60  
 cccacacacct atgagccgtc gctgcgtgac gttcggaccg tcgtgtattc gagagtcgcg  
 120  
 ctatcgaaact acctcatgct cgaacctcat tcggtcatca agaccatcga ctcttcctta  
 180  
 cctacgggat ctatcaatgt ctccctggct gaggaagccc aaaagtacgg cgcacaagtg  
 240  
 atcccgctgg ttgaaaatgc caacctagac accgtgtggc tgggggttgcg cgtcattggc  
 300  
 aagggcgcca ggcggggagc cgaccgctct tcctcgtctt acctccagct gacgtcggtg  
 360  
 gaggggcctg gggacttcac tgcctatatc actgggacct ttggtcgacc tcagatct  
 418

<210> 2494  
 <211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 2494  
 Thr Arg Gln Val Ala Gly Asp Arg Ala Thr Val Thr Ser Met Val Pro  
 1 5 10 15  
 Ser Gly Ala Asp Pro His Thr Tyr Glu Pro Ser Leu Arg Asp Val Arg  
 20 25 30  
 Thr Val Val Tyr Ser Arg Val Ala Leu Ser Asn Tyr Leu Met Leu Glu  
 35 40 45  
 Pro His Ser Val Ile Lys Thr Ile Asp Ser Ser Leu Pro Thr Gly Ser  
 50 55 60  
 Ile Asn Val Ser Leu Ala Glu Glu Ala Gln Lys Tyr Gly Ala Gln Val  
 65 70 75 80  
 Ile Pro Leu Val Glu Asn Ala Asn Leu Asp Thr Val Trp Leu Gly Leu  
 85 90 95  
 Arg Val Ile Gly Lys Gly Ala Arg Arg Gly Ala Asp Arg Ser Ser Ser  
 100 105 110  
 Val Tyr Leu Gln Leu Thr Ser Val Glu Gly Pro Gly Asp Phe Thr Ala  
 115 120 125

Tyr Ile Thr Gly Thr Phe Gly Arg Pro Gln Ile  
 130 135

<210> 2495  
 <211> 1478  
 <212> DNA  
 <213> Homo sapiens

<400> 2495  
 nnggcctggc ccagttgcac cagcagcgct gcggacactc ggggcggcag tcggtctgtc  
 60  
 agtcctcccc ccaggtcccc egggccgcac ctgccgcccc cacctgcagc tccgcacctg  
 120  
 cggccagtgc ctactgccct ctcttgccgc ccgcacctgc agccccgcac ctgccgcttg  
 180  
 cacctgcagc cccgcgctct acccggttca agcatggctg accagggccc cttcgacacg  
 240  
 gacgtcaaca ccctgacctg cttcgtcatg gaggaggcca ggaaggcccg cggcacgggc  
 300  
 gaggttgccc agctgctcaa ctgcctctgc acagcagtca aagccatctc ttcggcgggtg  
 360  
 cgcaaggcgg gcatcgcgca cctctatggc attgctgggt ctaccaacgt gacagggtgat  
 420  
 caagttaaga agctggacgt cctctccaac gacctgggta tgaacatgtt aaagtcattc  
 480  
 tttgccacgt gtgttctcgt gtcagaagaa gataaacacg ccatcatagt ggaaccggag  
 540  
 aaaaggggta aatatgtggt ctgttttgat ccccttgatg gatcttccaa catcgattgc  
 600  
 cttgtgtccg ttggaacctt ttttggcacc tatagaaaga aatcaactga tgagccttct  
 660  
 gagaaggatg ctctgcaacc aggccggaac ctggtggcag ccggctacgc actgtatggc  
 720  
 agtgccacca tgctggctct tgccatggac tgtgggggtca actgcttcat gctggacctg  
 780  
 gccatcgggg agttcatttt ggtggacaag gatgtgaaga taaaaaagaa aggtaaaatc  
 840  
 tacagcetta acgaggggta cgccaaggac tttgacctg ccgtcactga gtacatccag  
 900  
 aggaagaagt tccccccaga taattcagct ccttatgggg cccgggtatgt gggctccatg  
 960  
 gtggctgatg ttcacgcac tctgggtctac ggagggatat ttctgtaccc cgctaacaag  
 1020  
 aagagcccca atggaaagct gagactgctg tacgaatgca accccatggc ctacgtcatg  
 1080  
 gagaaggctg ggggaatggc caccactggg aaggaggccg tgtagacgt cattccaca  
 1140  
 gacattcacc agagggcgcc ggtgatcttg gggcccccg acgacgtgct cgagttcctg  
 1200  
 aagggtgatg agaagcactc tgcccagtga gcacctgccc tgctgcac cggagaattg  
 1260  
 cctctacctg gaccttttgt ctcacacagc agtaccctga cctgctgtgc accttacatt  
 1320

cctagagagc agaaataaaa agcatgacta tttccacat caaatgctgt agaagcttg  
1380  
gcactcccta accaaatgct gtctccataa tgccactggg gttaagatat attttgagt  
1440  
gatggaggag aaataaactt attcctcctt aaaaaaaaa  
1478

<210> 2496  
<211> 338  
<212> PRT  
<213> Homo sapiens

<400> 2496  
Met Ala Asp Gln Ala Pro Phe Asp Thr Asp Val Asn Thr Leu Thr Arg  
1 5 10 15  
Phe Val Met Glu Glu Gly Arg Lys Ala Arg Gly Thr Gly Glu Leu Thr  
20 25 30  
Gln Leu Leu Asn Ser Leu Cys Thr Ala Val Lys Ala Ile Ser Ser Ala  
35 40 45  
Val Arg Lys Ala Gly Ile Ala His Leu Tyr Gly Ile Ala Gly Ser Thr  
50 55 60  
Asn Val Thr Gly Asp Gln Val Lys Lys Leu Asp Val Leu Ser Asn Asp  
65 70 75 80  
Leu Val Met Asn Met Leu Lys Ser Ser Phe Ala Thr Cys Val Leu Val  
85 90 95  
Ser Glu Glu Asp Lys His Ala Ile Ile Val Glu Pro Glu Lys Arg Gly  
100 105 110  
Lys Tyr Val Val Cys Phe Asp Pro Leu Asp Gly Ser Ser Asn Ile Asp  
115 120 125  
Cys Leu Val Ser Val Gly Thr Ile Phe Gly Ile Tyr Arg Lys Lys Ser  
130 135 140  
Thr Asp Glu Pro Ser Glu Lys Asp Ala Leu Gln Pro Gly Arg Asn Leu  
145 150 155 160  
Val Ala Ala Gly Tyr Ala Leu Tyr Gly Ser Ala Thr Met Leu Val Leu  
165 170 175  
Ala Met Asp Cys Gly Val Asn Cys Phe Met Leu Asp Pro Ala Ile Gly  
180 185 190  
Glu Phe Ile Leu Val Asp Lys Asp Val Lys Ile Lys Lys Lys Gly Lys  
195 200 205  
Ile Tyr Ser Leu Asn Glu Gly Tyr Ala Lys Asp Phe Asp Pro Ala Val  
210 215 220  
Thr Glu Tyr Ile Gln Arg Lys Lys Phe Pro Pro Asp Asn Ser Ala Pro  
225 230 235 240  
Tyr Gly Ala Arg Tyr Val Gly Ser Met Val Ala Asp Val His Arg Thr  
245 250 255  
Leu Val Tyr Gly Gly Ile Phe Leu Tyr Pro Ala Asn Lys Lys Ser Pro  
260 265 270  
Asn Gly Lys Leu Arg Leu Leu Tyr Glu Cys Asn Pro Met Ala Tyr Val  
275 280 285  
Met Glu Lys Ala Gly Gly Met Ala Thr Thr Gly Lys Glu Ala Val Leu 290  
295 300  
Asp Val Ile Pro Thr Asp Ile His Gln Arg Ala Pro Val Ile Leu Gly  
305 310 315 320  
Ser Pro Asp Asp Val Leu Glu Phe Leu Lys Val Tyr Glu Lys His Ser

325 330 335

Ala Gln

<210> 2497  
<211> 399  
<212> DNA  
<213> Homo sapiens

<400> 2497  
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cttggctacc tgccacagga tccccgcgac ccagacatgg aaatgatcgc gagggcaagg  
120  
atcctgtcag cgcgtggcct ggaccacata ctggaacgga tgcgcaccct ggagtatcag  
180  
atggcgaacg gttccgagga cgaccgtgcc gttgcgatgg acaaatacgc gaaggctgaa  
240  
gaccgtctcg tcggggcgcg tggctatggc gcctctgcag aggcagcccg aatcgcgtcg  
300  
aaattggggc ttgacgaccg cgtcctttcc cagccgttga aaaacctctc ggggtggtcag  
360  
cgtcgtcgcg tcgagctggc gcgcatactc ttttccgga  
399

<210> 2498  
<211> 133  
<212> PRT  
<213> Homo sapiens

<400> 2498  
Thr Arg Val Leu Ala Gly Glu Thr Leu Pro Ala Ala Gly Ser Val Arg  
1 5 10 15  
Arg Thr Gly Glu Leu Gly Tyr Leu Pro Gln Asp Pro Arg Asp Pro Asp  
20 25 30  
Met Glu Met Ile Ala Arg Ala Arg Ile Leu Ser Ala Arg Gly Leu Asp  
35 40 45  
His Ile Leu Glu Arg Met Arg Thr Leu Glu Tyr Gln Met Ala Asn Gly  
50 55 60  
Ser Glu Asp Asp Arg Ala Val Ala Met Asp Lys Tyr Ala Lys Ala Glu  
65 70 75 80  
Asp Arg Leu Val Ala Ala Gly Gly Tyr Gly Ala Ser Ala Glu Ala Ala  
85 90 95  
Arg Ile Ala Ser Asn Leu Gly Leu Asp Asp Arg Val Leu Ser Gln Pro  
100 105 110  
Leu Lys Asn Leu Ser Gly Gly Gln Arg Arg Arg Val Glu Leu Ala Arg  
115 120 125  
Ile Leu Phe Ser Gly  
130

<210> 2499  
<211> 348  
<212> DNA  
<213> Homo sapiens



<400> 2499  
 nggccgggag aagaccggtt ctatatggcc taccacgaca ccgagtgggg cgtgccggaa  
 60  
 tatgacgacc gcgcattgta cgagaagctc attctcgacg gattccaggc cggcctgtcg  
 120  
 tggatcacca tcctgcgcaa gcgcgacaac ttctgcaaag ccttcgacga tttccagccc  
 180  
 gagaagatag cgcgttacaa tgagaagaag gtccacgcgc tgatgaacga tgccggcatc  
 240  
 gtgcgcaacc gcgccaagat cgaaggcacg atcgccagcg cgaaggcgta tctcgacatc  
 300  
 atggaaaaag gcccgggctt ctccaggctg ctgtgggact tcgtcgac  
 348

<210> 2500  
 <211> 116  
 <212> PRT  
 <213> Homo sapiens

<400> 2500  
 Xaa Pro Gly Glu Asp Pro Phe Tyr Met Ala Tyr His Asp Thr Glu Trp  
 1 5 10 15  
 Gly Val Pro Glu Tyr Asp Asp Arg Ala Leu Tyr Glu Lys Leu Ile Leu  
 20 25 30  
 Asp Gly Phe Gln Ala Gly Leu Ser Trp Ile Thr Ile Leu Arg Lys Arg  
 35 40 45  
 Asp Asn Phe Arg Lys Ala Phe Asp Asp Phe Gln Pro Glu Lys Ile Ala  
 50 55 60  
 Arg Tyr Asn Glu Lys Lys Val His Ala Leu Met Asn Asp Ala Gly Ile  
 65 70 75 80  
 Val Arg Asn Arg Ala Lys Ile Glu Gly Thr Ile Ala Ser Ala Lys Ala  
 85 90 95  
 Tyr Leu Asp Ile Met Glu Lys Gly Pro Gly Phe Ser Arg Leu Leu Trp  
 100 105 110  
 Asp Phe Val Asp  
 115

<210> 2501  
 <211> 569  
 <212> DNA  
 <213> Homo sapiens

<400> 2501  
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 60  
 taatgcccac taagccactc catacacttc tttaaatagg aaaatatatg taaagtacgt  
 120  
 acttagcaca gggcctgacc tatagtaatg gtcaagaatg atagcggggg tgaggtatgg  
 180  
 ctttcaagag tcaaacaatt ttactggtgc atcatttcca tttattcttt ctcttttgca  
 240  
 taataaaaacc actcttaaga ttctaccttg gttagttaga gacaacagtt ctctggaaag  
 300

tagattctat agcttcaact ccctgaagag atgtgtgcta atttacatca aaaaaatcct  
 360  
 taagggtata aaatatgcca agaactgtca acatcacaga ttaccactgg tagcttctgg  
 420  
 tatattgtta agtttccact taatttttaa gggacactag agaattagta tgactcacct  
 480  
 aactaagtt tatatactgt atttaacagt gtaattttca aatatgacag gaataaccca  
 540  
 gatgtgaaat gctgaatcat taatcacag  
 569

<210> 2502

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2502

Met	Ile	Ala	Gly	Val	Arg	Tyr	Gly	Phe	Gln	Glu	Ser	Asn	Asn	Phe	Thr
1				5					10					15	
Gly	Ala	Ser	Phe	Pro	Phe	Ile	Leu	Ser	Leu	Leu	His	Asn	Lys	Thr	Thr
			20					25					30		
Leu	Lys	Ile	Leu	Pro	Trp	Leu	Val	Arg	Asp	Asn	Ser	Ser	Leu	Glu	Ser
			35				40					45			
Arg	Phe	Tyr	Ser	Phe	Asn	Ser	Leu	Lys	Arg	Cys	Val	Leu	Ile	Tyr	Ile
			50			55				60					
Lys	Lys	Ile	Leu	Lys	Gly	Ile	Lys	Tyr	Ala	Lys	Asn	Cys	Gln	His	His
65					70					75				80	
Arg	Leu	Pro	Leu	Val	Ala	Ser	Gly	Ile	Leu	Leu	Ser	Phe	His	Leu	Ile
				85					90					95	
Phe	Lys	Gly	His												
			100												

<210> 2503

<211> 419

<212> DNA

<213> Homo sapiens

<400> 2503

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 aaggccttgc tacctcagca gtcctacagc ttggcccagc cgctgtattc tccagtctgc  
 120  
 accaatgggg agcgttttct ctacctgccg ccacctcact acgtcggtcc ccacatccca  
 180  
 tcgtccttgg catcacccat gaggetctcg acaccttcgg cctccccagc catcccgct  
 240  
 ctcgctccatt gcgcagacaa aagcctcccg tggaagatgg gcgtcagccc tgggaatcct  
 300  
 gttgattccc acgcctatcc tcacatccag aacagtaagc agcccagggt tcctcttgcc  
 360  
 aaggcgggtca ccagtggcct gccgggggac acagctctcc tgttgcccc ctcacgcgt  
 419

<210> 2504

<211> 121  
 <212> PRT  
 <213> Homo sapiens

<400> 2504  
 Met Tyr Lys Ala Leu Leu Pro Gln Gln Ser Tyr Ser Leu Ala Gln Pro  
 1 5 10 15  
 Leu Tyr Ser Pro Val Cys Thr Asn Gly Glu Arg Phe Leu Tyr Leu Pro  
 20 25 30  
 Pro Pro His Tyr Val Gly Pro His Ile Pro Ser Ser Leu Ala Ser Pro  
 35 40 45  
 Met Arg Leu Ser Thr Pro Ser Ala Ser Pro Ala Ile Pro Pro Leu Val  
 50 55 60  
 His Cys Ala Asp Lys Ser Leu Pro Trp Lys Met Gly Val Ser Pro Gly  
 65 70 75 80  
 Asn Pro Val Asp Ser His Ala Tyr Pro His Ile Gln Asn Ser Lys Gln  
 85 90 95  
 Pro Arg Val Pro Ser Ala Lys Ala Val Thr Ser Gly Leu Pro Gly Asp  
 100 105 110  
 Thr Ala Leu Leu Leu Pro Pro Ser Arg  
 115 120

<210> 2505  
 <211> 540  
 <212> DNA  
 <213> Homo sapiens

<400> 2505  
 tccggagcca atccgactca ggccctcgtc tggagccagg tgctgttgag catgggggttg  
 60  
 ccgctcgtgt tggcgccgtt ggctcggttc accggcgatc ggcgtctgat gggccaatgg  
 120  
 acgaatgggc gtgtcatggc cgccatcgcg tggatcgctg tggcagcagt ctcggctctc  
 180  
 aacgtgggtc tcgtcgctcga gacggtcatg ggtgcatgat ccttgagggc agttttctgg  
 240  
 cgacaatcgt gaaaatgagt gacaaactca agcgggtgac gacgccgaac cccgcaccga  
 300  
 cctctgcccc cgagctagcc aacgatttgg ccactgcatt tcgcgggtac cctgctggag  
 360  
 tggcgatcct cagcagcatg ggagcggctg ggcccagagg cttgacggtc tcctccctgg  
 420  
 cgtcgggtgc agtcgtcccc gctgttgtgt cggtgtcgtt gggtaatggt tcgacgaccc  
 480  
 tggccaccct gacggaggag tcccgcgtca tcgtccacat gcttgatgca gatcgcgcg  
 540

<210> 2506  
 <211> 72  
 <212> PRT  
 <213> Homo sapiens

<400> 2506  
 Ser Gly Ala Asn Pro Thr Gln Ala Leu Val Trp Ser Gln Val Leu Leu

```

      1             5             10             15
Ser Met Gly Leu Pro Leu Val Leu Val Pro Leu Ala Arg Phe Thr Gly
      20             25             30
Asp Arg Arg Leu Met Gly Gln Trp Thr Asn Gly Arg Val Met Ala Ala
      35             40             45
Ile Ala Trp Ile Val Val Ala Ala Val Ser Ala Leu Asn Val Val Leu
      50             55             60
Val Val Glu Thr Val Met Gly Ala
65                               70

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&lt;210&gt; 2507

&lt;211&gt; 922

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2507

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naccgctgaa gggcagagga gagagaccag tgaaggggga ggaggcgcc aaaaggagac
60
agcttcatgc cccagggaca taaatagccc ggctgctgca ggtacctgaa ggagttcagg
120
acggagcagt gccccctgtt ttacagcac aagtgcgcgc agcaccggcc gttcacctgc
180
ttccactggc acttcctcaa ccagcggcgc cgcaggcccc tccgcaggcg cgacggcacc
240
ttcaactaca gccccgacgt gtactgctcc aagtacaacg aagccaccgg cgtgtgcccc
300
gacggcgacg agtgtcccta cctgcaccgg acgacggggg acacagaacg caagtaccac
360
ctgcgttact acaaaacagg aacctgcac cagagacag acgcacgtgg ccaactgcgtg
420
aagaatgggc tgcactgtgc cttcgcgcac gggcccatg acctccgctc cctgtctac
480
gacatcaggg agcttcaggc catggaggcc ttgcagaatg gccagaccac ggtagagggg
540
agcatagagg gccagtcggc tggggctgcg agccatgcc tgaatagaaa gatcctcagc
600
gaggagcctc ggtggcaaga gactgcttat gtgctgggga actataagac ggagccttgc
660
aagaagcccc cgcggctgtg ccgccaaggc tatgcctgtc cctactacca caacagcaag
720
gaccggcggc ggagcccccg gaagcacaaa tacaggctgt ctccatgtcc aaacgtcaag
780
cacggggatg agtggggaga ccctggcaag tgtgagaacg gagacgcctg ccagtactgc
840
cacacccgca ccgagcagca gttccacccc gagatctaca agtccaccaa gtgcaacgga
900
aggggggggg gggtgagggg gg
922

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&lt;210&gt; 2508

&lt;211&gt; 278

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2508

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Pro Gly Cys Cys Arg Tyr Leu Lys Glu Phe Arg Thr Glu Gln Cys Pro
1      5      10      15
Leu Phe Ser Gln His Lys Cys Ala Gln His Arg Pro Phe Thr Cys Phe
20      25      30
His Trp His Phe Leu Asn Gln Arg Arg Arg Pro Leu Arg Arg Arg
35      40      45
Asp Gly Thr Phe Asn Tyr Ser Pro Asp Val Tyr Cys Ser Lys Tyr Asn
50      55      60
Glu Ala Thr Gly Val Cys Pro Asp Gly Asp Glu Cys Pro Tyr Leu His
65      70      75      80
Arg Thr Thr Gly Asp Thr Glu Arg Lys Tyr His Leu Arg Tyr Tyr Lys
85      90      95
Thr Gly Thr Cys Ile His Glu Thr Asp Ala Arg Gly His Cys Val Lys
100      105      110
Asn Gly Leu His Cys Ala Phe Ala His Gly Pro His Asp Leu Arg Ser
115      120      125
Pro Val Tyr Asp Ile Arg Glu Leu Gln Ala Met Glu Ala Leu Gln Asn
130      135      140
Gly Gln Thr Thr Val Glu Gly Ser Ile Glu Gly Gln Ser Ala Gly Ala
145      150      155      160
Ala Ser His Ala Met Ile Glu Lys Ile Leu Ser Glu Glu Pro Arg Trp
165      170      175
Gln Glu Thr Ala Tyr Val Leu Gly Asn Tyr Lys Thr Glu Pro Cys Lys
180      185      190
Lys Pro Pro Arg Leu Cys Arg Gln Gly Tyr Ala Cys Pro Tyr Tyr His
195      200      205
Asn Ser Lys Asp Arg Arg Arg Ser Pro Arg Lys His Lys Tyr Arg Ser
210      215      220
Ser Pro Cys Pro Asn Val Lys His Gly Asp Glu Trp Gly Asp Pro Gly
225      230      235      240
Lys Cys Glu Asn Gly Asp Ala Cys Gln Tyr Cys His Thr Arg Thr Glu
245      250      255
Gln Gln Phe His Pro Glu Ile Tyr Lys Ser Thr Lys Cys Asn Gly Arg
260      265      270
Gly Gly Gly Val Arg Glu
275

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&lt;210&gt; 2509

&lt;211&gt; 348

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2509

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gccggccttg acctgggccc ggcatggct ccacggcaag gtccaatact ccgtgcgctt
60
gtggcgctgg acttcgtcga tgcccgcgag gttttgctgc ccgcgaccat tggactggac
120
gttcatgaac ggggtggagcc cggcaaaacc gaaactcaac caatccttgg ggatgctgga
180
cggcaggttg ccgagggcaa acacgttgac cacgttcgca ccgacaccac cgaccacggc
240
caccgtcccc agcggaatct cgtagactta gcgccagggt tggttaaggcg tgtagcggtc
300

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gtaacgacgg gtgacctcga actcggggct tcaaagtctt ctgctgtg  
348

<210> 2510  
<211> 108  
<212> PRT  
<213> Homo sapiens

<400> 2510  
Met Ala Pro Arg Gln Gly Pro Ile Leu Arg Ala Leu Val Ala Leu Asp  
1 5 10 15  
Phe Val Asp Ala Arg Glu Val Leu Leu Pro Ala Thr Ile Gly Leu Asp  
20 25 30  
Val His Glu Arg Val Glu Pro Gly Lys Thr Glu Thr Gln Pro Ile Leu  
35 40 45  
Gly Asp Ala Gly Arg Gln Val Ala Glu Gly Lys His Val Asp His Val  
50 55 60  
Arg Thr Asp Thr Thr Asp His Gly His Arg Ser Gln Arg Asn Leu Val  
65 70 75 80  
Asp Leu Ala Pro Gly Leu Val Arg Arg Val Ala Val Val Thr Thr Gly  
85 90 95  
Asp Leu Glu Leu Gly Ala Ser Lys Ser Ser Ala Val  
100 105

<210> 2511  
<211> 663  
<212> DNA  
<213> Homo sapiens

<400> 2511  
nnacgcgtgt gggaccatat caggggagcc cgatgggtct caggtaaggc ccgggggtgt  
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tccctgacta ggctgctgtc gttggctccc gtcgtcaacg agcaagatct gcaagtgtc  
120  
cctgtcatcg cacacgtcgg ttatccgcag gccgcccagc agtattacca gttgctttta  
180  
gcattacgcc caggacgcgt tgctggcctg gcggagatcg tcgtcaacgg tcaacctttt  
240  
accgtcactg acgccactga ggatgaacta gctctcactg cttgggctcg taccctctc  
300  
gagggaactc ccatcgccat ggatggatcg tggcagctgc atcgccgtcg agcgcccct  
360  
gagccagttc gggtcgctaa gcgcttcggt ggtgagcaat cgaacacctc gatcatggtg  
420  
ggcgacgcca tcatcatcaa aatgttccgc cgcctggagc ccggcgacaa cettgacatc  
480  
accgtgcata gcgccctcaa cgatgccggg atctcatcgg tggccacatt gtacggcttt  
540  
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600  
aggttgccac agccccgga tggctgggaa ctcactcactg ccaaggcagt cgatctcgtc  
660  
gac  
663

<210> 2512  
 <211> 221  
 <212> PRT  
 <213> Homo sapiens

<400> 2512  
 Xaa Arg Val Trp Asp His Ile Arg Gly Ala Arg Trp Phe Ser Gly Lys  
 1 5 10 15  
 Gly Arg Gly Gly Ser Leu Thr Arg Leu Leu Ser Leu Ala Pro Val Val  
 20 25 30  
 Asn Glu Gln Asp Leu Gln Val Leu Pro Val Ile Ala His Val Gly Tyr  
 35 40 45  
 Pro Gln Ala Ala Asp Glu Tyr Tyr Gln Leu Leu Leu Ala Leu Arg Pro  
 50 55 60  
 Gly Arg Val Ala Gly Leu Ala Glu Ile Val Val Asn Gly Gln Pro Phe  
 65 70 75 80  
 Thr Val Thr Asp Ala Thr Glu Asp Glu Leu Ala Leu Thr Ala Trp Ala  
 85 90 95  
 Arg Ile Leu Leu Glu Gly Thr Pro Ile Ala Met Asp Gly Ser Trp Gln  
 100 105 110  
 Leu His Arg Arg Arg Ala Ala Pro Glu Pro Val Arg Phe Ala Lys Arg  
 115 120 125  
 Phe Gly Gly Glu Gln Ser Asn Thr Ser Ile Met Val Gly Asp Ala Ile  
 130 135 140  
 Ile Ile Lys Met Phe Arg Arg Leu Glu Pro Gly Asp Asn Leu Asp Ile  
 145 150 155 160  
 Thr Val His Ser Ala Leu Asn Asp Ala Gly Ile Ser Ser Val Ala Thr  
 165 170 175  
 Leu Tyr Gly Phe Met Ser Gly Gln Ile Pro Ala Glu Glu His Ile Pro  
 180 185 190  
 Val Asp Leu Ala Met Ile Ile Glu Arg Leu Pro Gln Pro Arg Asp Gly  
 195 200 205  
 Trp Glu Leu Ile Thr Ala Lys Ala Val Asp Leu Val Asp  
 210 215 220

<210> 2513  
 <211> 368  
 <212> DNA  
 <213> Homo sapiens

<400> 2513  
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 cagcttgacc tggccaagaa ccgcctctat caggccattc agagagctga tgacatcttg  
 120  
 gacctgaagt tctgcatgga tggagttcag actgctttga ggagtgaaga ttatgagcag  
 180  
 gctgcagcac atattcatcg ctacttgtgc ctggacaagt cggtcattga gctcagccga  
 240  
 cagggcaaag agggtcagca tccgaaactg gagcatgatt gatgccaaacc tgaaattgct  
 300  
 gcaggaagct gagcaacgct tcaaagccat tgtggcagag aagtttgcca ttgccaccaa  
 360

ggaagggtg  
368

<210> 2514  
<211> 93  
<212> PRT  
<213> Homo sapiens

<400> 2514  
Leu Ala Gly Met Ile Thr Phe Thr Cys Asn Leu Ala Glu Asn Val Ser  
1 5 10 15  
Ser Lys Val Arg Gln Leu Asp Leu Ala Lys Asn Arg Leu Tyr Gln Ala  
20 25 30  
Ile Gln Arg Ala Asp Asp Ile Leu Asp Leu Lys Phe Cys Met Asp Gly  
35 40 45  
Val Gln Thr Ala Leu Arg Ser Glu Asp Tyr Glu Gln Ala Ala Ala His  
50 55 60  
Ile His Arg Tyr Leu Cys Leu Asp Lys Ser Val Ile Glu Leu Ser Arg  
65 70 75 80  
Gln Gly Lys Glu Gly Gln His Pro Lys Leu Glu His Asp  
85 90

<210> 2515  
<211> 351  
<212> DNA  
<213> Homo sapiens

<400> 2515  
agatccttaag ggccccagga atttggtttg ttttcctttt taactcccca ggtaattatg  
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gctcatcctg gaccagaccc ttctaccccc tccaactccc caacaactgg gcaattggaa  
120  
tatcagtcga tccctaaaag ccaaccaggc tctcccaggg gaggcaggaa atccctgctc  
180  
cctccatccc ccaccgggaa tgctgcaggg ggcttgaggg aggcgacaca gtggggagct  
240  
ctgggtgcag gtgggcagac aatggggcaa cacacccct cagccccgct ccagtatcag  
300  
cattccagac ccaccacct gggcccttgg tcaccgggag acctcacgcg t  
351

<210> 2516  
<211> 98  
<212> PRT  
<213> Homo sapiens

<400> 2516  
Met Ala His Pro Gly Pro Asp Pro Ser Tyr Pro Ser Asn Ser Pro Thr  
1 5 10 15  
Thr Gly Gln Leu Glu Tyr Gln Ser Ile Pro Lys Ser Gln Pro Gly Ser  
20 25 30  
Pro Glu Gly Gly Arg Lys Ser Leu Leu Pro Pro Ser Pro Thr Gly Asn  
35 40 45  
Ala Ala Gly Gly Leu Arg Glu Ala Thr Gln Trp Gly Ala Leu Gly Ala



50                      55                      60  
 Gly Gly Gln Thr Met Gly Gln His Thr Pro Ser Ala Pro Leu Gln Tyr  
 65                      70                      75                      80  
 Gln His Ser Arg Pro Thr His Leu Gly Pro Trp Ser Pro Gly Asp Leu  
                     85                      90                      95  
 Thr Arg

<210> 2517  
 <211> 356  
 <212> DNA  
 <213> Homo sapiens

<400> 2517  
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 ggaggtggcc agtgagtcag gaggcggggg ggggggctag ggcttcccca ggggtcagga  
 120  
 cctgtcacca accaaacccc atgggcctat tcagcagccc caacttggct ggtctggccg  
 180  
 aggccacaca ttccctgggg actgagctcc aaggtgctgg gtcctgagc aggaagcggc  
 240  
 cagtgttgag tgggcagtgt ctactccag cccctccttc ccaggccagt tcttctcatc  
 300  
 tccctcagtc ttccaacagc aggcctcat ctacagggca gacctgactg gctagc  
 356

<210> 2518  
 <211> 103  
 <212> PRT  
 <213> Homo sapiens

<400> 2518  
 Met Gly Ala Glu Gly Glu Asp Lys Arg Arg Trp Pro Val Ser Gln Glu  
 1                      5                      10                      15  
 Ala Gly Gly Gly Ala Arg Ala Ser Pro Gly Val Arg Thr Cys His Gln  
                     20                      25                      30  
 Pro Asn Pro Met Gly Leu Phe Ser Ser Pro Asn Leu Ala Gly Leu Ala  
                     35                      40                      45  
 Glu Ala Thr His Ser Leu Gly Thr Glu Leu Gln Gly Ala Gly Ser Leu  
                     50                      55                      60  
 Ser Arg Lys Arg Pro Val Leu Ser Gly Gln Cys Leu Thr Pro Ala Pro  
 65                      70                      75                      80  
 Pro Ser Gln Ala Ser Ser Ser His Leu Pro Gln Ser Phe Pro Ser Arg  
                     85                      90                      95  
 Pro Ser Ser Thr Gly Gln Thr  
 100

<210> 2519  
 <211> 830  
 <212> DNA  
 <213> Homo sapiens

<400> 2519

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 cgacagccct ggtgccaaagc cctgtctgag cccaccagg aggaagcgcg tgctggctgc  
 120  
 tctccatctg ctctgggact ctggcctgct gcttctctg cctgccactc cccaaccccg  
 180  
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 240  
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 300  
 acacctctt gcaggactca tggctaccgt gggctcgac caccagctc cccatgcgtt  
 360  
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&lt;210&gt; 2520

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2520

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&lt;210&gt; 2521

&lt;211&gt; 4291

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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<210> 2522

<211> 952

<212> PRT

<213> Homo sapiens

<400> 2522

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Ala	Pro	Leu	Ala	Leu	Val	Gly	Val	Thr	Leu	Leu	Leu	Ala	Ala	Pro	Pro
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Cys	Ser	Gly	Ala	Ala	Thr	Pro	Thr	Pro	Ser	Leu	Pro	Pro	Pro	Pro	Ala
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Met Phe Leu Gly Val Ser Ile Ile Ala Asp Arg Phe Met Ala Ala Ile
115        120        125
Glu Val Ile Thr Ser Lys Glu Lys Glu Ile Thr Ile Thr Lys Ala Asn
130        135        140
Gly Glu Thr Ser Val Gly Thr Val Arg Ile Trp Asn Glu Thr Val Ser
145        150        155        160
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Ser Val Ile Glu Val Cys Gly His Asn Phe Gln Ala Gly Glu Leu Gly
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Pro Gly Thr Ile Val Gly Ser Ala Ala Phe Asn Met Phe Val Val Ile
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Ala Val Cys Ile Tyr Val Ile Pro Ala Gly Glu Ser Arg Lys Ile Lys
210        215        220
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245        250        255
Val Trp Glu Ala Leu Leu Thr Leu Val Phe Phe Pro Val Cys Val Val
260        265        270
Phe Ala Trp Met Ala Asp Lys Arg Leu Leu Phe Tyr Lys Tyr Val Tyr
275        280        285
Lys Arg Tyr Arg Thr Asp Pro Arg Ser Gly Ile Ile Ile Gly Ala Glu
290        295        300
Gly Asp Pro Pro Lys Ser Ile Glu Leu Asp Gly Thr Phe Val Gly Ala
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Glu Ala Pro Gly Glu Leu Gly Gly Leu Gly Pro Gly Pro Ala Glu Ala
325        330        335
Arg Glu Leu Asp Ala Ser Arg Arg Glu Val Ile Gln Ile Leu Lys Asp
340        345        350
Leu Lys Gln Lys His Pro Asp Lys Asp Leu Glu Gln Leu Val Gly Ile
355        360        365
Ala Asn Tyr Tyr Ala Leu Leu His Gln Gln Lys Ser Arg Ala Phe Tyr
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Arg His Ala Ala Asp Ala Ser Arg Arg Ala Ala Pro Ala Glu Gly Ala
405        410        415
Gly Glu Asp Glu Asp Asp Gly Ala Ser Arg Ile Phe Phe Glu Pro Ser
420        425        430
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Cys Gln Gly Gly Glu Gly Asn Ser Thr Phe Tyr Val Asp Tyr Arg Thr
450        455        460
Glu Asp Gly Ser Ala Lys Ala Gly Ser Asp Tyr Glu Tyr Ser Glu Gly
465        470        475        480
Thr Leu Val Phe Lys Pro Gly Glu Thr Gln Lys Glu Leu Arg Ile Gly
485        490        495
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 <212> DNA  
 <213> Homo sapiens

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<210> 2524  
 <211> 130  
 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Thr Thr Ala Gly Arg Ile His Gly Asn Gln Leu Ile His His Ser Asp  
 50 55 60  
 Arg Gly Ser Gln Tyr Val Ser Leu Lys Tyr Ser Thr Ala Leu Ala Glu  
 65 70 75 80  
 Ser Gly Ile Arg Pro Ser Val Gly Thr Val Gly Asp Ser Tyr Asp Asn  
 85 90 95  
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 Arg Xaa  
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<210> 2525  
 <211> 378  
 <212> DNA  
 <213> Homo sapiens



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 <212> PRT  
 <213> Homo sapiens

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 Ile Ser Asp Ile Ser Thr Thr Gly Ala Ser Phe Arg Ser Ala His Arg  
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 65 70 75 80  
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<212> PRT  
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35 40 45  
Asp Arg Pro Thr Ile Ser Thr Ala Ser Glu Thr Ser Val Tyr Val Thr  
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Trp Ile Pro Arg Gly Asn Gly Gly Phe Pro Ile Gln Ser Phe Arg Val  
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<210> 2529  
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<212> DNA  
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<210> 2530  
<211> 121  
<212> PRT  
<213> Homo sapiens

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Tyr Thr Arg Val Thr Ala Glu Thr Arg Arg Ser Lys Pro Gly Asp Thr
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Ser His Gln Gly Asp Cys Val Gly Glu Arg Ala Ser Arg Pro Leu Gly
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Gly His Gly Gly His Arg Glu Arg Leu Gln Trp Gln Ser Arg Pro Gly
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<210> 2531  
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 <212> DNA  
 <213> Homo sapiens

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396

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<210> 2532  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

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Ser Ser Val Lys Asp Met Leu Ala Phe Leu Phe Leu Pro Asp Ile Pro
35      40      45
Glu Ser Arg Glu Leu Ser Cys Asn Ala Ser Asn Pro Leu Gly Leu Asn
50      55      60
Ser Phe Pro Arg Glu Thr Arg Ser Thr Val Arg Ser Gln Gly Pro Pro
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<210> 2533  
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 <212> DNA  
 <213> Homo sapiens

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<210> 2534  
 <211> 96  
 <212> PRT  
 <213> Homo sapiens

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 Cys Met Val Thr Ser Val Arg Glu Glu Gly Pro Arg Val Leu Phe Lys  
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<210> 2535  
 <211> 1904  
 <212> DNA  
 <213> Homo sapiens

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aagtggcagg cccagccagg cgccaccgaa gagagctgca tggtagggaga cgtgaacctc  
360  
ttcctcacag atctagaaga cccacacctg ggggagatcg aggtcatgat tgcagagccc  
420  
agctgcaggg gtaagggcct tggcactgag gccgttctcg cgatgctgtc ttacggagtg  
480  
accacgctag gtctgaccaa gtttgaggct aaaattgggc aaggaaatga accaagcatc  
540  
cggatgttcc agaaacttca ctttgagcag gtggctacga gcagtgtttt tcaggagggtg  
600  
accctcagac tgacagtgag tgagtccgag catcagtggc ttctggagca gaccagccac  
660  
gtggaagaga agccttacag agatgggtcg gcagagccct gctgatggct gggccttgtg  
720  
ggcagccact ctgtgtgagc aggggtgttg gccatacac ttcaaagacc agagccctgc  
780  
actgggagag tgctcctggc ccaggtcggg aatcaccttt cgaggccctt cagactctgg  
840  
cggggccttg tgtggcctcc ctccagctag tgggtgtggc gagcagactc cagggccagg  
900  
gccagttccc ttctcccctc ccggccaaac ccagaccag actctaggaa gctggaatgg  
960  
agggcagggg tccatgggag atgtcgggat gaaggtggga gctggagggt cagggggacc  
1020  
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1080  
tgggagtga gctccaggca ctaccagctt tcctgatttt cccgttttgt ccatgtgaag  
1140  
agctaccacg agccccagcc tcacagtgtc cactcaaggg cagcttggtc ctcttgctct  
1200  
gcagaggcag gctggtgtga ccctgggaac ttgacccggg aacaacaggg ggtccagagt  
1260  
gagtgtggcc tggccccctc acctagtgtc cgtcctcctc tctcctggag ccagtcttga  
1320  
gtttaaaggc attagtgtta gatacagctc cttgtggctg gaaaacaccc ctctgctgat  
1380  
aaagctcagg gggcactgag gaagcagagg ccccttgggg gtgccctcct gaagagagcg  
1440  
tcaggccatc agctctgtcc ctctggtgct ccacgtctg ttctcacc ccatctctg  
1500  
ggagcagctg cactgactg gccacgcggg ggcagtggag gcacaggctc agggtaggccc  
1560  
ggctacctgg caccctatgg cttacaaagt agagtggcc cagtttcctt ccacctgagg  
1620  
ggagcactct gactcctaac agtcttcctt gccctgccat catctggggg ggctggctgt  
1680

caagaaaggc cgggcatgct ttctaaacac agccacagga ggcttgtagg gcattctcca  
 1740  
 ggtggggaaa cagtcttaga taagtaaggt gacttgccca aggcctccca gcacccttga  
 1800  
 tcttggagtc tcacagcaga ctgcatgtga acaactggaa ccgaaaacat gcctcagtat  
 1860  
 aaaacaaaca ttataaaacg aaaaaaaaaa aaaaaaaaag tact  
 1904

<210> 2536  
 <211> 207  
 <212> PRT  
 <213> Homo sapiens

<400> 2536  
 Met Arg Leu Asn Gln Asn Thr Leu Leu Leu Gly Lys Lys Val Val Leu  
 1 5 10 15  
 Val Pro Tyr Thr Ser Glu His Val Pro Ser Arg Tyr His Glu Trp Met  
 20 25 30  
 Lys Ser Glu Glu Leu Gln Arg Leu Thr Ala Ser Glu Pro Leu Thr Leu  
 35 40 45  
 Glu Gln Glu Tyr Ala Met Gln Cys Ser Trp Gln Glu Asp Ala Asp Lys  
 50 55 60  
 Cys Thr Phe Ile Val Leu Asp Ala Glu Lys Trp Gln Ala Gln Pro Gly  
 65 70 75 80  
 Ala Thr Glu Glu Ser Cys Met Val Gly Asp Val Asn Leu Phe Leu Thr  
 85 90 95  
 Asp Leu Glu Asp Pro Thr Leu Gly Glu Ile Glu Val Met Ile Ala Glu  
 100 105 110  
 Pro Ser Cys Arg Gly Lys Gly Leu Gly Thr Glu Ala Val Leu Ala Met  
 115 120 125  
 Leu Ser Tyr Gly Val Thr Thr Leu Gly Leu Thr Lys Phe Glu Ala Lys  
 130 135 140  
 Ile Gly Gln Gly Asn Glu Pro Ser Ile Arg Met Phe Gln Lys Leu His  
 145 150 155 160  
 Phe Glu Gln Val Ala Thr Ser Ser Val Phe Gln Glu Val Thr Leu Arg  
 165 170 175  
 Leu Thr Val Ser Glu Ser Glu His Gln Trp Leu Leu Glu Gln Thr Ser  
 180 185 190  
 His Val Glu Glu Lys Pro Tyr Arg Asp Gly Ser Ala Glu Pro Cys  
 195 200 205

<210> 2537  
 <211> 509  
 <212> DNA  
 <213> Homo sapiens

<400> 2537  
 acgcgttctc gtaaggacaa gcttgacgcc gaggtgcatg ccggtgaagg ccccccggg  
 60  
 gatgtcatcg tgctgcgggt ttccggagcc atggcgaagc gtcctgcctc agttatcctt  
 120  
 ccgctgctac tgctggactc ccccgctatt gcgtggtggc ccttctccgg ccctgacaac  
 180

ctcgctcgg accccatcgg agcccttgcg gaccgccgca tcaccgactc ggcagctgac  
 240  
 aaagatccgt gcaaagccct catacgccgt gcggctcacc taaccgaggg tgactccgac  
 300  
 ctgtgttggg ctgcgaccac cagctggaga gccctagctg cagcagcttt ggatcaacat  
 360  
 ccagcgaccg tcaagttcgc tcgggtagag tcagccgccg gtaatgcgcc ggcgatgctg  
 420  
 ctggcagcct ggctaggatt gcgtctcggc gtcccggctg agcgggtgac aaccgacgag  
 480  
 cccggcatct ccgcgacgt catgtcgac  
 509

<210> 2538

<211> 169

<212> PRT

<213> Homo sapiens

<400> 2538

Thr	Arg	Ser	Arg	Lys	Asp	Lys	Leu	Asp	Ala	Glu	Val	His	Ala	Gly	Glu
1				5					10					15	
Gly	Thr	Pro	Gly	Asp	Val	Ile	Val	Leu	Arg	Phe	Ser	Gly	Ala	Met	Ala
			20					25					30		
Lys	Arg	Pro	Ala	Ser	Val	Ile	Leu	Pro	Leu	Leu	Leu	Ser	Asp	Ser	Pro
		35					40					45			
Val	Ile	Ala	Trp	Trp	Pro	Phe	Ser	Gly	Pro	Asp	Asn	Leu	Ala	Ser	Asp
		50				55					60				
Pro	Ile	Gly	Ala	Leu	Ala	Asp	Arg	Arg	Ile	Thr	Asp	Ser	Ala	Ala	Asp
65				70					75					80	
Lys	Asp	Pro	Cys	Lys	Ala	Leu	Ile	Arg	Arg	Ala	Ala	His	Leu	Thr	Glu
			85					90					95		
Gly	Asp	Ser	Asp	Leu	Cys	Trp	Ala	Arg	Thr	Thr	Ser	Trp	Arg	Ala	Leu
			100					105					110		
Ala	Ala	Ala	Ala	Leu	Asp	Gln	His	Pro	Ala	Thr	Val	Lys	Phe	Ala	Arg
			115				120					125			
Val	Glu	Ser	Ala	Ala	Gly	Asn	Ala	Pro	Ala	Met	Leu	Leu	Ala	Ala	Trp
		130				135				140					
Leu	Gly	Leu	Arg	Leu	Gly	Val	Pro	Val	Glu	Arg	Val	Thr	Thr	Asp	Ala
145				150					155					160	
Pro	Gly	Ile	Ser	Ala	Ile	Val	Met	Ser							
				165											

<210> 2539

<211> 453

<212> DNA

<213> Homo sapiens

<400> 2539

aagcttctac tgccgcgagc acgtcgtcca ccgtcgaggt catggttcta gtttgccgag  
 60  
 tcgcggcatg acccgaggat agtgacgtgg gacaatggct acgtgcgttt tctcaacgag  
 120  
 cagccgaact acgacctgac gtatgacgac gtcttcatgg caccaaaccg ttcctcgggtg  
 180

gggtcccgca tgaacgtcga cctcacgtca acagacgggc taggcactcc tctgcccctc  
 240  
 gtagtgccca atatgaccgc aatttccgga cgtcgcattg cagagaccat cgccaggcgc  
 300  
 ggaggcattg ctgttctgcc ccaagatata ccggcggatt tcgtcgcccg gtccattcgg  
 360  
 cgcgtcaaag atgcgcatac tcgattcgac accccagtcga ccgtcaaccc gacaacgact  
 420  
 gtcggtgagg ccatgaactt gctcaacaag cgc  
 453

<210> 2540

<211> 134

<212> PRT

<213> Homo sapiens

<400> 2540

Phe	Ala	Ala	Ser	Arg	His	Asp	Pro	Arg	Ile	Val	Thr	Trp	Asp	Asn	Gly
1				5					10					15	
Tyr	Val	Arg	Phe	Leu	Asn	Glu	Gln	Pro	Asn	Tyr	Asp	Leu	Thr	Tyr	Asp
		20					25					30			
Asp	Val	Phe	Met	Ala	Pro	Asn	Arg	Ser	Ser	Val	Gly	Ser	Arg	Met	Asn
		35				40					45				
Val	Asp	Leu	Thr	Ser	Thr	Asp	Gly	Leu	Gly	Thr	Pro	Leu	Pro	Leu	Val
	50					55				60					
Val	Ala	Asn	Met	Thr	Ala	Ile	Ser	Gly	Arg	Arg	Met	Ala	Glu	Thr	Ile
65				70				75			80				
Ala	Arg	Arg	Gly	Gly	Ile	Ala	Val	Leu	Pro	Gln	Asp	Ile	Pro	Ala	Asp
			85					90				95			
Phe	Val	Ala	Arg	Ser	Ile	Arg	Arg	Val	Lys	Asp	Ala	His	Thr	Arg	Phe
		100						105				110			
Asp	Thr	Pro	Val	Thr	Val	Asn	Pro	Thr	Thr	Thr	Val	Gly	Glu	Ala	Met
		115				120					125				
Asn	Leu	Leu	Asn	Lys	Arg										
															130

<210> 2541

<211> 564

<212> DNA

<213> Homo sapiens

<400> 2541

accggtctcc cacggagtgc tgtttcctca ggtactgcac tgtatacaac tctaaatgca  
 60  
 ccctgcattg aaccatttgc agggcacacg cagtctacat gtatcccagg ttttatgctc  
 120  
 acagagcctg caatactccg tgtctggaat acgttatttg ctgcacacct cccagaggaa  
 180  
 catgtaacgt ctgtgtaaca tgctatcctg cacacatctg aaagaatctg tgtacacaac  
 240  
 actattatgc tgtgcacaca tttcctcata ttctgtgtag agagcacctc attttgtact  
 300  
 caaatattcg gcttccataa caagttacat tgctcacatc ttaaaatatt cattacacgt  
 360



gaaaccaccg catggtaccg acatccttct ggaatgtccc gcacagaggc tgatatatgt  
 420  
 gcacagttct cactgttctg cgtgcccagc ccctcacact ggacgcccac ctcacactct  
 480  
 tctgccaaagg gagactttgg ttctcccctt ccctgtgctg gctgtgcggg ccacagtcct  
 540  
 ctgcacgccca gcagcatgac gcgt  
 564

<210> 2542  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens

<400> 2542  
 Met Leu Cys Thr His Phe Leu Ile Phe Cys Val Glu Ser Thr Ser Phe  
 1 5 10 15  
 Cys Thr Gln Ile Phe Gly Phe His Asn Lys Leu His Cys Ser His Leu  
 20 25 30  
 Lys Ile Phe Ile Thr Arg Glu Thr Thr Ala Trp Tyr Arg His Pro Ser  
 35 40 45  
 Gly Met Ser Arg Thr Glu Ala Asp Ile Cys Ala Gln Phe Ser Leu Phe  
 50 55 60  
 Cys Val Pro Ser Pro Ser His Trp Thr Pro Thr Ser His Ser Ser Ala  
 65 70 75 80  
 Lys Gly Asp Phe Gly Ser Pro Leu Pro Cys Ala Gly Cys Ala Gly His  
 85 90 95  
 Ser Pro Leu His Ala Ser Ser Met Thr Arg  
 100 105

<210> 2543  
 <211> 387  
 <212> DNA  
 <213> Homo sapiens

<400> 2543  
 cgctgaagg gggcggggaa aatggaatgg gggggaagg cgcggtggg gacatgctgg  
 60  
 aacgtgccca tgctttctgc accacactgg atgactgaag gggaagggaac gagcgtctta  
 120  
 ccgctcctga tgagattttt gtttttcctt aacaaagaaa tgtgtatgaa tgcacgtctg  
 180  
 tttgcagggg cagggaggag gagggtcctt ggaatagctg ccgacaacag ctggaactcc  
 240  
 tgtctgggtc cccagctgg gctagagagg gcagtgatca tctgtccact ggacaggaag  
 300  
 gtttgcaaag ggctgtttgc ttactgggtc ccaattttta gccttctgaa gccctgtcc  
 360  
 aatggggccc agcaggcagc agtgctg  
 387

<210> 2544  
 <211> 122  
 <212> PRT

<213> Homo sapiens

<400> 2544

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Met Glu Trp Gly Gly Arg Ala Arg Val Gly Thr Cys Trp Asn Val Pro
 1           5           10           15
Met Leu Ser Ala Pro His Trp Met Thr Glu Gly Glu Gly Thr Ser Val
          20           25           30
Leu Pro Leu Leu Met Arg Phe Leu Phe Leu Pro Asn Lys Glu Met Cys
          35           40           45
Met Asn Ala Arg Leu Phe Ala Gly Ala Gly Arg Arg Val Leu Gly
          50           55           60
Ile Ala Ala Asp Asn Ser Trp Asn Ser Cys Leu Gly Pro Pro Ala Gly
65           70           75           80
Leu Glu Arg Ala Val Ile Ile Cys Pro Leu Asp Arg Lys Val Cys Lys
          85           90           95
Gly Leu Phe Ala Tyr Trp Val Pro Ile Phe Ser Leu Leu Lys Pro Leu
          100          105          110
Ser Asn Gly Ala Gln Gln Ala Ala Val Leu
          115          120

```

<210> 2545

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2545

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gcgattatatt tcgtgctgcc cggacttatc atggctggct ggtggtcagg tttcccgtag
60
tggaccaccc tcgtatctcg tctagtcggc ggcacccctcg gcgttatgta ctcgattccg
120
ctgcgtcggg ccctcgtgac aggctcggat cttccctacc cggagggcgt cgcaggagct
180
gaggtgctca aagtaggcga ttccgctggt gccgccgagg ctaacaaggt gggctctgcga
240
gtcatcatcg tcggttctgt ggtctctgca gcgtacgccc tgttgctcga tcttaagctt
300
gtgaagtcgg cgctgaccaa gcctttcaag acgggc
336

```

<210> 2546

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2546

```

Ala Ile Ile Phe Val Leu Pro Gly Leu Ile Met Val Gly Trp Trp Ser
 1           5           10           15
Gly Phe Pro Tyr Trp Thr Thr Leu Ala Ile Cys Leu Val Gly Gly Ile
          20           25           30
Leu Gly Val Met Tyr Ser Ile Pro Leu Arg Arg Ala Leu Val Thr Gly
          35           40           45
Ser Asp Leu Pro Tyr Pro Glu Gly Val Ala Gly Ala Glu Val Leu Lys
          50           55           60
Val Gly Asp Ser Ala Gly Ala Ala Glu Ala Asn Lys Val Gly Leu Arg

```

```

65          70          75          80
Val Ile Ile Val Gly Ser Val Val Ser Ala Ala Tyr Ala Leu Leu Ser
          85          90          95
Asp Leu Lys Leu Val Lys Ser Ala Leu Thr Lys Pro Phe Lys Thr Gly
          100          105          110

```

<210> 2547  
 <211> 556  
 <212> DNA  
 <213> Homo sapiens

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<400> 2547
acgcgtgcac acacacacac gcaggcgtac acgctcacia gtgcacacac acatatgagt
60
ttccacaca tctcaccata tcactttctc tttacttttt aaagacaggg cacttgccct
120
tatggccaat aatattatgc ccaagctaca acattccgag tcaatcacia aggttataaa
180
cttcatttga actgaagacc acctgtaagc acgcagctca aatgtttctca cctagaaatt
240
caagttgtgt ttggaaagtgt gacttaacgg tcaaagaaaa aggcctgggc aacttcagag
300
agggacaccc agccctgcta cgttgcgtgt cattatgtgg tgctgtgcta tccatagaga
360
aagaggagat gaaaaagatt ctacaaagag agatcaaact gcaagaaagc acaaagattt
420
catcaccaca atatgaaggg ctccttggtg taaatgactt ttttaggtcc caataagaaa
480
taccatctat tctatctgga attattttat tagcttcaaa ttttattcta agattcatac
540
tatcagatca tctaga
556

```

<210> 2548  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2548
Met Asn Leu Arg Ile Lys Phe Glu Ala Asn Lys Ile Ile Pro Asp Arg
1          5          10          15
Ile Asp Gly Ile Ser Tyr Trp Asp Leu Lys Lys Ser Phe Ile Pro Arg
          20          25          30
Arg Pro Ser Tyr Cys Gly Asp Glu Ile Phe Val Leu Ser Cys Ser Leu
          35          40          45
Ile Ser Leu Cys Arg Ile Phe Phe Ile Ser Ser Phe Ser Met Asp Ser
          50          55          60
Thr Ala Pro His Asn Asp Thr Gln Arg Ser Arg Ala Gly Cys Pro Ser
65          70          75          80
Leu Lys Leu Ala Arg Pro Phe Ser Leu Thr Val Lys Ser Thr Phe Gln
          85          90          95
Thr Gln Leu Glu Phe Leu Gly Glu Asn Ile
          100          105

```

<210> 2549  
<211> 435  
<212> DNA  
<213> Homo sapiens

<400> 2549  
nnccagcctc tctccgaccg cgtacgtatt gaatttgata aagaagccaa cacggttggt  
60  
atcgatgata atgggtgctcg catgtctcgt gaagaagcca ttacaaactt aggtacgatt  
120  
gctaaatcgg gcacctcttc tttcttagag caattgagtg gcgatcagaa aaaagacagc  
180  
caacttattg gtcaattcgg tgtaggcttt tactctgctt tcatcggtgc tgataaagta  
240  
acagtagaaa cacgtcgcgc aggtgcgacg gaaaatgaag cggttcgctg ggtatctgat  
300  
ggttctgggt aatttactat tgagacgacg gataaagcga ctctggttac acgcattact  
360  
ttgcatctga aagcagatga aaaagatttc gcagacaact tccgtctacg ttcattagta  
420  
acaaaatatt ctgat  
435

<210> 2550  
<211> 145  
<212> PRT  
<213> Homo sapiens

<400> 2550  
Xaa Gln Pro Leu Ser Asp Arg Val Arg Ile Glu Phe Asp Lys Glu Ala  
1 5 10 15  
Asn Thr Val Val Ile Asp Asp Asn Gly Val Gly Met Ser Arg Glu Glu  
20 25 30  
Ala Ile Thr Asn Leu Gly Thr Ile Ala Lys Ser Gly Thr Ser Ser Phe  
35 40 45  
Leu Glu Gln Leu Ser Gly Asp Gln Lys Lys Asp Ser Gln Leu Ile Gly  
50 55 60  
Gln Phe Gly Val Gly Phe Tyr Ser Ala Phe Ile Val Ala Asp Lys Val  
65 70 75 80  
Thr Val Glu Thr Arg Arg Ala Gly Ala Thr Glu Asn Glu Ala Val Arg  
85 90 95  
Trp Val Ser Asp Gly Ser Gly Glu Phe Thr Ile Glu Thr Ile Asp Lys  
100 105 110  
Ala Thr Arg Gly Thr Arg Ile Thr Leu His Leu Lys Ala Asp Glu Lys  
115 120 125  
Asp Phe Ala Asp Asn Phe Arg Leu Arg Ser Leu Val Thr Lys Tyr Ser  
130 135 140  
Asp  
145

<210> 2551  
<211> 403  
<212> DNA  
<213> Homo sapiens

<400> 2551  
 nngccggcca gcctcacatc agtctctccg ccccggggaa ggctcagcac tttaaatacga  
 60  
 ggactccact tctggggacg cctgggtcgt tcgcccacca ggcttaggct acgctccatg  
 120  
 ctccccacgc aatctctgtc tacacctcct gcggcgccct gccctcctcc gaccccttcc  
 180  
 cagccannaa gtccccccac cccttcagag aagcagcctc aaattccaga agtggaggct  
 240  
 ccagcctccc cgcgaggtag cagccccaca gtcttctggg agccattgtg gccagggacg  
 300  
 gcctctggac tgccaggctg ggttggggac caggggaacat cggctctactc aggtgtgagg  
 360  
 gggcagggtct ggctgcccc aaagtggct ccatactgga can  
 403

<210> 2552  
 <211> 134  
 <212> PRT  
 <213> Homo sapiens

<400> 2552  
 Xaa Pro Ala Ser Leu Thr Ser Val Ser Pro Pro Arg Gly Arg Leu Ser  
 1 5 10 15  
 Thr Leu Asn Arg Gly Leu His Phe Trp Gly Arg Leu Val Arg Ser Pro  
 20 25 30  
 Thr Arg Pro Arg Leu Arg Ser Met Leu Pro Gln Gln Ser Leu Ser Thr  
 35 40 45  
 Pro Pro Ala Ala Pro Cys Pro Pro Pro Thr Pro Phe Gln Pro Xaa Ser  
 50 55 60  
 Pro Pro Thr Pro Ser Glu Lys Gln Pro Gln Ile Pro Glu Val Glu Ala  
 65 70 75 80  
 Pro Ala Ser Pro Arg Gly Thr Ser Pro Thr Val Phe Trp Glu Pro Leu  
 85 90 95  
 Trp Pro Gly Thr Ala Ser Gly Leu Pro Gly Trp Val Gly Asp Gln Gly  
 100 105 110  
 Thr Ser Val Tyr Ser Gly Val Arg Gly Gln Val Trp Pro Ala Pro Lys  
 115 120 125  
 Leu Ala Pro Ser Trp Thr  
 130

<210> 2553  
 <211> 380  
 <212> DNA  
 <213> Homo sapiens

<400> 2553  
 actagtgtcc ctataagaaa aggaaaggac caagacacag gaaagatgaa gcagagattg  
 60  
 gagagataca gcatgggcca aggagcactg ggagccagca gcagctggaa gaggcaggag  
 120  
 gcatacctccc tagaccgcac aggatgtctac tgggtgagcc tgctgtcctg gaaaaggcgt  
 180

gaagtctgcc tgagtgggca ggggcttctg cgcagcacc agcaaggcca aggtggaagg  
 240  
 gaccctcctg gcccctgtcc tggctccacc ctcagctgct ggcaggtggg tcaccaggcc  
 300  
 tctgccc aaa gaaactcctg caggcagctc tggacccct gtcttacaca ccttctcact  
 360  
 gagcctgcc gcatcccagn  
 380

<210> 2554  
 <211> 111  
 <212> PRT  
 <213> Homo sapiens

<400> 2554  
 Met Lys Gln Arg Leu Glu Arg Tyr Ser Met Gly Gln Gly Ala Leu Gly  
 1 5 10 15  
 Ala Ser Ser Ser Trp Lys Arg Gln Glu Ala Ser Ser Leu Asp Arg Thr  
 20 25 30  
 Gly Cys Tyr Trp Val Ser Leu Leu Ser Trp Lys Arg Arg Glu Val Cys  
 35 40 45  
 Leu Ser Gly Gln Gly Leu Leu Arg Ser Thr Gln Gln Gly Gln Gly Gly  
 50 55 60  
 Arg Asp Pro Pro Gly Pro Cys Pro Gly Ser Thr Leu Ser Cys Trp Gln  
 65 70 75 80  
 Val Gly His Gln Ala Ser Ala Gln Arg Asn Ser Cys Arg Gln Leu Trp  
 85 90 95  
 Thr Pro Cys Leu Thr His Leu Leu Thr Glu Pro Ala Ser Ile Pro  
 100 105 110

<210> 2555  
 <211> 368  
 <212> DNA  
 <213> Homo sapiens

<400> 2555  
 ntccggatgg aaaagtaaag accagcaata gccataaacg ccattaacac ataccatata  
 60  
 atgttggttaa tgctgcccgg tagttcgggtg gcattcttca tgggcaatag tttaatggga  
 120  
 gataacgcga ataattggtag tgcgttcta gtgctcacag acctgggtcac ccaaatagaa  
 180  
 ggatttatat cctcccatat cctcattttt gtgctcggtg gcctcggcat tgtctttacc  
 240  
 gttgccactc gaggtgtaca gtccgcctc ttcgggcaca tgtggcacct catgctcgat  
 300  
 tcacggaagc aaaagggcac ctccctctcc agctctcaag cattcacagt gggctctcgat  
 360  
 cacgcggn  
 368

<210> 2556  
 <211> 102  
 <212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2556

```

Met Leu Leu Met Leu Pro Gly Ser Ser Val Ala Phe Phe Met Gly Asn
 1           5           10           15
Ser Leu Met Gly Asp Asn Ala Asn Gly Ser Val Val Leu Val Leu
 20           25           30
Thr Asp Leu Val Thr Gln Ile Glu Gly Phe Ile Ser Ser His Ile Leu
 35           40           45
Ile Phe Val Leu Val Gly Leu Gly Ile Val Phe Thr Val Ala Thr Arg
 50           55           60
Gly Val Gln Phe Arg Leu Phe Gly His Met Trp His Leu Met Leu Asp
 65           70           75           80
Ser Arg Lys Gln Lys Gly Thr Ser Leu Ser Ser Ser Gln Ala Phe Thr
 85           90           95
Val Gly Leu Asp His Ala
100

```

&lt;210&gt; 2557

&lt;211&gt; 408

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2557

```

atcactactc cagttggtga ggcagttctg ggtcgcatct taaatgtgat cggtgagccg
60
attgatgaga tgggccccagt taacgcgaaa gaaaaatggg aaattcaccg tccagctcct
120
aaattcgaag accaagctgt taaagctgag atgttgatga ctggtattaa ggtcgttgat
180
cttcttgca cttacgcaaa ggggtggcaag atcgggtctct tcggtggtgc gggcgtaggt
240
aaaacagttt tgattcaaga gttgattcgt aacatcgcta ctgagcacgg tggatactct
300
gtattcgca ggtgcggcga gcgtactcgc gaaggtaacg atctttgggt tgagatgaaa
360
gaatcaggcg ttatcgcaaa gaccgcactt gtattcgggt agatgaat
408

```

&lt;210&gt; 2558

&lt;211&gt; 136

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2558

```

Ile Thr Thr Pro Val Gly Glu Ala Val Leu Gly Arg Ile Leu Asn Val
 1           5           10           15
Ile Gly Glu Pro Ile Asp Glu Met Gly Pro Val Asn Ala Lys Glu Lys
 20           25           30
Trp Glu Ile His Arg Pro Ala Pro Lys Phe Glu Asp Gln Ala Val Lys
 35           40           45
Ala Glu Met Leu Met Thr Gly Ile Lys Val Val Asp Leu Leu Ala Pro
 50           55           60
Tyr Ala Lys Gly Gly Lys Ile Gly Leu Phe Gly Gly Ala Gly Val Gly

```

```

65          70          75          80
Lys Thr Val Leu Ile Gln Glu Leu Ile Arg Asn Ile Ala Thr Glu His
      85          90          95
Gly Gly Tyr Ser Val Phe Ala Gly Val Gly Glu Arg Thr Arg Glu Gly
      100        105        110
Asn Asp Leu Trp Val Glu Met Lys Glu Ser Gly Val Ile Ala Lys Thr
      115        120        125
Ala Leu Val Phe Gly Gln Met Asn
      130        135

```

<210> 2559  
 <211> 389  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2559
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60
gcttttctga aagatcgact gaatgcaata caggaagagc attctaagga cctgaagctg
120
ttgcatctcg aagttatgaa ttgctgccag caactgagag ctgtaaaaga ggaagaagac
180
aaggcacaag atgaggtgca aaggttgact gccactctga agattgcctc gcagacaaag
240
aagaatgcag ccattattga agaggaactg aagaccacaa aacgtaaaat gaaccttaaa
300
attcaagagc ttctagagat gacctcattt ccaagttggt tgaagaaaat aagaacctgc
360
aggatatctt tcaacaggaa catgaagaa
389

```

<210> 2560  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2560
Ser Leu Lys Met Asn Ile Phe Arg Leu Gln Thr Glu Lys Asp Leu Asn
  1          5          10          15
Pro Gln Lys Thr Ala Phe Leu Lys Asp Arg Leu Asn Ala Ile Gln Glu
      20          25          30
Glu His Ser Lys Asp Leu Lys Leu Leu His Leu Glu Val Met Asn Leu
      35          40          45
Arg Gln Gln Leu Arg Ala Val Lys Glu Glu Glu Asp Lys Ala Gln Asp
      50          55          60
Glu Val Gln Arg Leu Thr Ala Thr Leu Lys Ile Ala Ser Gln Thr Lys
      65          70          75          80
Lys Asn Ala Ala Ile Ile Glu Glu Glu Leu Lys Thr Thr Lys Arg Lys
      85          90          95
Met Asn Leu Lys Ile Gln Glu Leu Leu Glu Met Thr Ser Phe Pro Ser
      100        105        110
Trp Leu Lys Lys Ile Arg Thr Cys Arg Ile Ser Phe Asn Arg Asn Met
      115        120        125
Lys

```



<210> 2561  
 <211> 429  
 <212> DNA  
 <213> Homo sapiens

<400> 2561  
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 60  
 atgtggagcc atttgaacag gtcctctctc tggagcatat tttcttctgt cacttgtaga  
 120  
 aaagctgtat tggattgtga ggcaatgaaa acaaatgaat tcccttctcc atgtttggac  
 180  
 tcaaagacta aggtggttat gaagggtcaa aatgtatcta tgttttgttc ccataagaac  
 240  
 aaatcactgc agatcaccta ttcattgttt cgacgtaaga cacacctggg aaccaggat  
 300  
 ggaaaagggtg aacctgcgat ttttaaccta agcatcacag aagcccatga atcaggcccc  
 360  
 tacaaatgca aagcccaagt taccagctgt tcaaaataca gtcgtgactt cagcttcacg  
 420  
 attgtcgac  
 429

<210> 2562  
 <211> 143  
 <212> PRT  
 <213> Homo sapiens

<400> 2562  
 Xaa Leu Thr Thr Val Leu Leu Cys Leu Leu Thr Pro Ser Trp Thr  
 1 5 10 15  
 Ser Thr Gly Arg Met Trp Ser His Leu Asn Arg Leu Leu Phe Trp Ser  
 20 25 30  
 Ile Phe Ser Ser Val Thr Cys Arg Lys Ala Val Leu Asp Cys Glu Ala  
 35 40 45  
 Met Lys Thr Asn Glu Phe Pro Ser Pro Cys Leu Asp Ser Lys Thr Lys  
 50 55 60  
 Val Val Met Lys Gly Gln Asn Val Ser Met Phe Cys Ser His Lys Asn  
 65 70 75 80  
 Lys Ser Leu Gln Ile Thr Tyr Ser Leu Phe Arg Arg Lys Thr His Leu  
 85 90 95  
 Gly Thr Gln Asp Gly Lys Gly Glu Pro Ala Ile Phe Asn Leu Ser Ile  
 100 105 110  
 Thr Glu Ala His Glu Ser Gly Pro Tyr Lys Cys Lys Ala Gln Val Thr  
 115 120 125  
 Ser Cys Ser Lys Tyr Ser Arg Asp Phe Ser Phe Thr Ile Val Asp  
 130 135 140

<210> 2563  
 <211> 267  
 <212> DNA  
 <213> Homo sapiens

<400> 2563  
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 60  
 accccgggtca ccatccagaa catgacctcc tcttatgtca ccatcacatc ccatgtcctt  
 120  
 aaggccttta ccctttggga acaggcagag gccctcacia ggaagaacaa agaattcttt  
 180  
 gctcagctca gcacaaaagt gcgctgttg gccctcaaca gcagcctggt ggacctggtg  
 240  
 cactacacaa ggcagggcct ccagcgg  
 267

<210> 2564  
 <211> 89  
 <212> PRT  
 <213> Homo sapiens

<400> 2564  
 Gly Ser Gln Thr Ser Ala Gly Ser Ser Met Gly Ala Val Gly Ala Thr  
 1 5 10 15  
 Ala Thr Val Ser Thr Pro Val Thr Ile Gln Asn Met Thr Ser Ser Tyr  
 20 25 30  
 Val Thr Ile Thr Ser His Val Leu Lys Ala Phe Thr Leu Trp Glu Gln  
 35 40 45  
 Ala Glu Ala Leu Thr Arg Lys Asn Lys Glu Phe Phe Ala Gln Leu Ser  
 50 55 60  
 Thr Lys Val Arg Val Leu Ala Leu Asn Ser Ser Leu Val Asp Leu Val  
 65 70 75 80  
 His Tyr Thr Arg Gln Gly Leu Gln Arg  
 85

<210> 2565  
 <211> 333  
 <212> DNA  
 <213> Homo sapiens

<400> 2565  
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 60  
 tggttcgaat tcgattcctt ggtcaatgcc cgtgacgtgg gcggaatccc caccgccgat  
 120  
 gggccggtga aatcccagcg actgatccgc agcgacaacc tgcaggccct caccgaggcc  
 180  
 gacatgccc agttgcagca actcgggtgc tccgatgtgg tcgatctgcy ttccacctat  
 240  
 gaggtggcca gcgagggccc ggggccgctg accgggctg gggtgacct ccaccccat  
 300  
 tccttcctgc ccgaccagca cgccaatgtg cac  
 333

<210> 2566  
 <211> 111  
 <212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2566

Leu Arg Thr Ala Pro Arg Val Leu Gly Gly Val Ser Thr Ala Arg Lys  
 1 5 10 15  
 Leu Ser His Val Trp Phe Glu Phe Asp Ser Leu Val Asn Ala Arg Asp  
 20 25 30  
 Val Gly Gly Ile Pro Thr Pro Asp Gly Pro Val Lys Ser Gln Arg Leu  
 35 40 45  
 Ile Arg Ser Asp Asn Leu Gln Ala Leu Thr Glu Ala Asp Ile Ala Gln  
 50 55 60  
 Leu Gln Gln Leu Gly Val Ser Asp Val Val Asp Leu Arg Ser Thr Tyr  
 65 70 75 80  
 Glu Val Ala Ser Glu Gly Pro Gly Pro Leu Thr Gly Arg Gly Val Thr  
 85 90 95  
 Ile His Pro His Ser Phe Leu Pro Asp Gln His Ala Asn Val His  
 100 105 110

&lt;210&gt; 2567

&lt;211&gt; 396

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2567

ngaattcaaa ctggtgttcg tatgggccat aagcaaggta catatacgat gcgttttaga  
 60  
 agccagtcca cagatcaacg tctattcgga accgatcaat ttagtattgg tgggcgctat  
 120  
 tctgtacgag gtttttagtgg agaagaaacc ttaagagggtg actcgggcta ttatgtacaa  
 180  
 aatgaatggg cattaccatt tagaaaacaa caaattactc catatgtagg gatagatatt  
 240  
 ggacatgtat gggggccatc tacagaaact caattaggta ataccttaat tgggtggtgta  
 300  
 gttggtgtac gtggtatggt tgggtgacgat gtaaactatg atgtatcact aggaacacca  
 360  
 attaagaaac cagaagggtt tgatacagat acgcgt  
 396

&lt;210&gt; 2568

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2568

Xaa Ile Gln Thr Gly Val Arg Met Gly His Lys Gln Gly Thr Tyr Thr  
 1 5 10 15  
 Met Arg Phe Arg Ser Gln Phe Thr Asp Gln Arg Leu Phe Gly Thr Asp  
 20 25 30  
 Gln Phe Ser Ile Gly Gly Arg Tyr Ser Val Arg Gly Phe Ser Gly Glu  
 35 40 45  
 Glu Thr Leu Arg Gly Asp Ser Gly Tyr Tyr Val Gln Asn Glu Trp Ala  
 50 55 60  
 Leu Pro Phe Arg Lys Gln Gln Ile Thr Pro Tyr Val Gly Ile Asp Ile

```

65          70          75          80
Gly His Val Trp Gly Pro Ser Thr Glu Thr Gln Leu Gly Asn Thr Leu
      85          90          95
Ile Gly Gly Val Val Gly Val Arg Gly Met Val Gly Asp Asp Val Asn
      100         105         110
Tyr Asp Val Ser Leu Gly Thr Pro Ile Lys Lys Pro Glu Gly Phe Asp
      115         120         125
Thr Asp Thr Arg
      130

```

<210> 2569  
 <211> 330  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2569
cttgctgctg gtgctgatgt gtccatgatt ggccagttcg gcgtcggttt ctactctgcc
60
tacctcgtcg ccgatagagt tgcgtgacc accaagcaca acgatgacga gcagtacgtg
120
tgggagtccc aagcggggcgg gtcgttcact gttactcgtg acacgtcagg ggagcagctt
180
ggcaggggca ctaagatcac actgttcctc aaggacgac agctggagta ccttgaggag
240
cgtcgcctca aggatctggt caagaagcac tctgagtcca tcagctaccc catctccctg
300
tggactgaaa agacaacaga gaaggaaatt
330

```

<210> 2570  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2570
Leu Ala Ala Gly Ala Asp Val Ser Met Ile Gly Gln Phe Gly Val Gly
1      5      10      15
Phe Tyr Ser Ala Tyr Leu Val Ala Asp Arg Val Val Val Thr Thr Lys
20     25     30
His Asn Asp Asp Glu Gln Tyr Val Trp Glu Ser Gln Ala Gly Gly Ser
35     40     45
Phe Thr Val Thr Arg Asp Thr Ser Gly Glu Gln Leu Gly Arg Gly Thr
50     55     60
Lys Ile Thr Leu Phe Leu Lys Asp Asp Gln Leu Glu Tyr Leu Glu Glu
65     70     75     80
Arg Arg Leu Lys Asp Leu Val Lys Lys His Ser Glu Phe Ile Ser Tyr
85     90     95
Pro Ile Ser Leu Trp Thr Glu Lys Thr Thr Glu Lys Glu Ile
100    105    110

```

<210> 2571  
 <211> 335  
 <212> DNA  
 <213> Homo sapiens

<400> 2571  
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 60  
 gtgctcctta aacatctcga taatgaacta tctgagctct ttactgagat cgctcgggag  
 120  
 aaatgggatg tccgttttagg gcagggaacg acagctatcg accaggtgga gaagcagcgt  
 180  
 gaagatgggt cttcctactt cgaaccacc attacattg aagacggcag cactgttacc  
 240  
 ggtgacgcat tcctagtgc taccggacgt acccctaaca ccgaccgcct tggcctcgac  
 300  
 aatgggtccg gtgtgaaggt tgaaagggga cgcg  
 335

<210> 2572  
 <211> 111  
 <212> PRT  
 <213> Homo sapiens

<400> 2572  
 Glu Phe Ala Asn Val Phe Ser Gly Met Gly Ser Thr Val Thr Leu Ile  
 1 5 10 15  
 Gly Arg Ser Pro Val Leu Leu Lys His Leu Asp Asn Glu Leu Ser Glu  
 20 25 30  
 Leu Phe Thr Glu Ile Ala Arg Glu Lys Trp Asp Val Arg Leu Gly Gln  
 35 40 45  
 Gly Thr Thr Ala Ile Asp Gln Val Glu Lys Gln Arg Glu Asp Gly Ser  
 50 55 60  
 Ser Tyr Phe Glu Thr Thr Ile Thr Phe Glu Asp Gly Ser Thr Val Thr  
 65 70 75 80  
 Gly Asp Ala Phe Leu Val Ala Thr Gly Arg Thr Pro Asn Thr Asp Arg  
 85 90 95  
 Leu Gly Leu Asp Asn Gly Ser Gly Val Lys Val Glu Arg Gly Arg  
 100 105 110

<210> 2573  
 <211> 460  
 <212> DNA  
 <213> Homo sapiens

<400> 2573  
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 gccggatcca taccggaccg ttctgtcagg gtggtcggac atcgacgaca ccgcagatgc  
 120  
 cgagacgacg ttgatacgtc caccggcgcg gtccgtgac cagccgctcg tcgccgttgc  
 180  
 cgccactggc acgatgaggg ccatcaccga gaagagaacg gccaccactc gcagaccacc  
 240  
 tcgtcccaga agagcgagga cgaaggcgat gacggcgatg accagagccg gtacagccaa  
 300  
 cgatcccacc agaacggagg agatgaaggt gagggcattg tgtgagggga ggatcgcggc  
 360

cactgaccac gccagtaccg gcagggtcag gatcagcccg acgagaccgg aagtgatgcg  
 420  
 tagccaggaa tgacgggagg ttttcgtgac agccacgcgt  
 460

<210> 2574  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 2574  
 Met Gly Thr Val Asp Leu Gly Arg Leu Val Arg Ala Gly Ser Ile Pro  
 1 5 10 15  
 Asp Arg Phe Val Arg Val Val Gly His Arg Arg His Arg Arg Cys Arg  
 20 25 30  
 Asp Asp Val Asp Thr Ser Thr Gly Ala Val Arg Asp Pro Arg Arg Arg  
 35 40 45  
 Arg Arg Cys Arg His Trp His Asp Glu Gly His His Arg Glu Glu Asn  
 50 55 60  
 Gly His His Ser Gln Thr Thr Ser Ser Gln Lys Ser Glu Asp Glu Gly  
 65 70 75 80  
 Asp Asp Gly Asp Asp Gln Ser Arg Tyr Ser Gln Arg Ser His Gln Asn  
 85 90 95  
 Gly Gly Asp Glu Gly Glu Gly Ile Val  
 100 105

<210> 2575  
 <211> 3954  
 <212> DNA  
 <213> Homo sapiens

<400> 2575  
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 60  
 ccaactctcg gcctccgaac agccacaggg gcaaagccct gtcaccccca ggatccggtc  
 120  
 atcagggaaa gaggacaggg agaccagaag agggccagct gggacgaggg ggcggacgcc  
 180  
 caggaggcaa cttctgagac gcagctcctg agaggggcag ggaccaggcg cgggaggcca  
 240  
 gagggggcac agagaacaaa cccctcaga agtgaagagg agagcggaag gaaccgagag  
 300  
 gggacggaca ggagctgagg aggaaagagg aggggagagg ggtcaggcca ggcagccaag  
 360  
 gagaagacgt gtggccgggg gctatcagaa ggaaactggg acggacgggc cgggctcggg  
 420  
 ctgtcctgtg gagcagcagc atccccgggg ccggcagagg cgccagtggc tggcggggat  
 480  
 gagtctctga gggccactgt ggagcgcccc gccatggccc cccgcaccct ctggagctgc  
 540  
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 600  
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 660

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720  
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780  
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1020  
gaaggtcctg gggagtccaga gaaggtgcag cagctggagg aacaggtgca gagcctgacc  
1080  
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1140  
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2160  
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2280

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3120  
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3180  
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3900



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3954

<210> 2576

<211> 1016

<212> PRT

<213> Homo sapiens

<400> 2576

Met	Ala	Pro	Arg	Thr	Leu	Trp	Ser	Cys	Tyr	Leu	Cys	Cys	Leu	Leu	Thr
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Ala	Ala	Ala	Gly	Ala	Ala	Ser	Tyr	Pro	Pro	Arg	Gly	Phe	Ser	Leu	Tyr
			20					25					30		
Thr	Gly	Ser	Ser	Gly	Ala	Leu	Ser	Pro	Gly	Gly	Pro	Gln	Ala	Gln	Ile
			35				40					45			
Ala	Pro	Arg	Pro	Ala	Ser	Arg	His	Arg	Asn	Trp	Cys	Ala	Tyr	Val	Val
			50			55					60				
Thr	Arg	Thr	Val	Ser	Cys	Val	Leu	Glu	Asp	Gly	Val	Glu	Thr	Tyr	Val
65					70					75				80	
Lys	Tyr	Gln	Pro	Cys	Ala	Trp	Gly	Gln	Pro	Gln	Cys	Pro	Gln	Ser	Ile
				85					90					95	
Met	Tyr	Arg	Arg	Phe	Leu	Arg	Pro	Arg	Tyr	Arg	Val	Ala	Tyr	Lys	Thr
				100				105					110		
Val	Thr	Asp	Met	Glu	Trp	Arg	Cys	Cys	Gln	Gly	Tyr	Gly	Gly	Asp	Asp
			115				120					125			
Cys	Ala	Glu	Ser	Pro	Ala	Pro	Ala	Leu	Gly	Pro	Ala	Ser	Ser	Thr	Pro
						135					140				
Arg	Pro	Leu	Ala	Arg	Pro	Ala	Arg	Pro	Asn	Leu	Ser	Gly	Ser	Ser	Ala
145					150					155				160	
Gly	Ser	Pro	Leu	Ser	Gly	Leu	Gly	Gly	Glu	Gly	Pro	Gly	Glu	Ser	Glu
				165					170					175	
Lys	Val	Gln	Gln	Leu	Glu	Glu	Gln	Val	Gln	Ser	Leu	Thr	Lys	Glu	Leu
				180				185					190		
Gln	Gly	Leu	Arg	Gly	Val	Leu	Gln	Gly	Leu	Ser	Gly	Arg	Leu	Ala	Glu
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Asp	Val	Gln	Arg	Ala	Val	Glu	Thr	Ala	Phe	Asn	Gly	Arg	Gln	Gln	Pro
			210				215				220				
Ala	Asp	Ala	Ala	Ala	Arg	Pro	Gly	Val	His	Glu	Thr	Leu	Asn	Glu	Ile
225					230					235				240	
Gln	His	Gln	Leu	Gln	Leu	Leu	Asp	Thr	Arg	Val	Ser	Thr	His	Asp	Gln
				245					250					255	
Glu	Leu	Gly	His	Leu	Asn	Asn	His	His	Gly	Gly	Ser	Ser	Ser	Ser	Gly
			260					265					270		
Gly	Ser	Arg	Ala	Pro	Ala	Pro	Ala	Ser	Ala	Pro	Pro	Gly	Pro	Ser	Glu
			275				280					285			
Glu	Leu	Leu	Arg	Gln	Leu	Glu	Gln	Arg	Leu	Gln	Glu	Ser	Cys	Ser	Val
			290			295				300					
Cys	Leu	Ala	Gly	Leu	Asp	Gly	Phe	Arg	Arg	Gln	Gln	Gln	Glu	Asp	Arg
305					310					315				320	
Glu	Arg	Leu	Arg	Ala	Met	Glu	Lys	Leu	Leu	Ala	Ser	Val	Glu	Glu	Arg
				325						330				335	
Gln	Arg	His	Leu	Ala	Gly	Leu	Ala	Val	Gly	Arg	Arg	Pro	Pro	Gln	Glu
			340					345					350		
Cys	Cys	Ser	Pro	Glu	Leu	Gly	Arg	Arg	Leu	Ala	Glu	Leu	Glu	Arg	Arg

```

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Leu Asp Val Val Ala Gly Ser Val Thr Val Leu Ser Gly Arg Arg Gly
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Thr Glu Leu Gly Gly Ala Ala Gly Gln Gly Gly His Pro Pro Gly Tyr
 385              390              395              400
Thr Ser Leu Ala Ser Arg Leu Ser Arg Leu Glu Asp Arg Phe Asn Ser
      405              410              415
Thr Leu Gly Pro Ser Glu Glu Gln Glu Glu Ser Trp Pro Gly Ala Pro
      420              425              430
Gly Gly Leu Ser His Trp Leu Pro Ala Ala Arg Gly Arg Leu Glu Gln
      435              440              445
Leu Gly Gly Leu Leu Ala Asn Val Ser Gly Glu Leu Gly Gly Arg Leu
      450              455              460
Asp Leu Leu Glu Glu Gln Val Ala Gly Ala Met Gln Ala Cys Gly Gln
      465              470              475              480
Leu Cys Ser Gly Ala Pro Gly Glu Gln Asp Ser Gln Val Ser Glu Ile
      485              490              495
Leu Ser Ala Leu Glu Arg Arg Val Leu Asp Ser Glu Gly Gln Leu Arg
      500              505              510
Leu Val Gly Ser Gly Leu His Thr Val Glu Ala Ala Gly Glu Ala Arg
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Gln Ala Thr Leu Glu Gly Leu Gln Glu Val Val Gly Arg Leu Gln Asp
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Arg Val Asp Ala Gln Asp Glu Thr Ala Ala Glu Phe Thr Leu Arg Leu
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Asn Leu Thr Ala Ala Arg Leu Gly Gln Leu Glu Gly Leu Leu Gln Ala
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His Gly Asp Glu Gly Cys Gly Ala Cys Gly Gly Val Gln Glu Glu Leu
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Pro Arg Gly Pro Gly Ala Gly Pro Gly Val Gly Gly Pro Ser Arg Gly
      610              615              620
Pro Leu Asp Gly Phe Ser Val Phe Gly Gly Ser Ser Gly Ser Ala Leu
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Gln Ala Leu Gln Gly Glu Leu Ser Glu Val Ile Leu Ser Phe Ser Ser
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Leu Asn Asp Ser Leu Asn Glu Leu Gln Thr Thr Val Glu Gly Gln Gly
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Ala Asp Leu Ala Asp Leu Gly Ala Thr Lys Asp Arg Ile Ile Ser Glu
      675              680              685
Ile Asn Arg Leu Gln Gln Glu Ala Thr Glu His Ala Thr Glu Ser Glu
      690              695              700
Glu Arg Phe Arg Gly Leu Glu Glu Gly Gln Ala Gln Ala Gly Gln Cys
      705              710              715              720
Pro Ser Leu Glu Gly Arg Leu Gly Arg Leu Glu Gly Val Cys Glu Arg
      725              730              735
Leu Asp Thr Val Ala Gly Gly Leu Gln Gly Leu Arg Glu Gly Leu Ser
      740              745              750
Arg His Val Ala Gly Leu Trp Ala Gly Leu Arg Glu Thr Asn Thr Thr
      755              760              765
Ser Gln Met Gln Ala Ala Leu Leu Glu Lys Leu Val Gly Gly Gln Ala
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Gly Leu Gly Arg Arg Leu Gly Ala Leu Asn Ser Ser Leu Gln Leu Leu

```

```

785          790          795          800
Glu Asp Arg Leu His Gln Leu Ser Leu Lys Asp Leu Thr Gly Pro Ala
      805          810          815
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Pro Ala Gly Pro Pro Gly Ser Pro Gly Lys Asp Gly Gln Glu Gly Pro
      835          840          845
Ile Gly Pro Pro Gly Pro Gln Gly Glu Gln Gly Val Glu Gly Ala Pro
      850          855          860
Ala Ala Pro Val Pro Gln Val Ala Phe Ser Ala Ala Leu Ser Leu Pro
865          870          875          880
Arg Ser Glu Pro Gly Thr Val Pro Phe Asp Arg Val Leu Leu Asn Asp
      885          890          895
Gly Gly Tyr Tyr Asp Pro Glu Thr Gly Val Phe Thr Ala Pro Leu Ala
      900          905          910
Gly Arg Tyr Leu Leu Ser Ala Val Leu Thr Gly His Arg His Glu Lys
      915          920          925
Val Glu Ala Val Leu Ser Arg Ser Asn Gln Gly Val Ala Arg Val Asp
      930          935          940
Ser Gly Gly Tyr Glu Pro Glu Gly Leu Glu Asn Lys Pro Val Ala Glu
945          950          955          960
Ser Gln Pro Ser Pro Gly Thr Leu Gly Val Phe Ser Leu Ile Leu Pro
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Leu Gln Ala Gly Asp Thr Val Cys Val Asp Leu Val Met Gly Gln Leu
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Ala His Ser Glu Glu Pro Leu Thr Ile Phe Ser Gly Ala Leu Leu Tyr
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Gly Asp Pro Glu Leu Glu His Ala
      1010          1015

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&lt;210&gt; 2577

&lt;211&gt; 343

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2577

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343

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&lt;210&gt; 2578

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2578

```

Met Ala Ser Trp Ala Ser Arg Arg Ser Trp Gly Trp Gly Gly Gly Val
 1           5           10           15
Val His Ser Ser Pro Ala Ala Ala Asp Leu Glu Pro Ser Val Ala Lys
           20           25           30
Cys Leu Leu Ser Lys Leu Arg Gly Ser Thr Gly Ala Gly Gln Thr Leu
           35           40           45
Leu Pro Pro Ala Gly Gln Cys Ser Leu Gly Tyr Arg Ala Leu Ser Pro
           50           55           60
Thr Val Thr Pro Glu Trp Ile Pro Ala Leu Pro Ala Leu Gly Ser Gln
65           70           75           80
Trp Gly Leu Gly Ala Ser Gln Gly Gln His Glu Pro Leu Ala Arg Val
           85           90           95
Ser Asn Arg Pro
           100

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&lt;210&gt; 2579

&lt;211&gt; 420

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2579

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420

```

&lt;210&gt; 2580

&lt;211&gt; 140

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2580

```

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           20           25           30
Thr Ala Thr Glu Ile Arg Asn Gln Val Lys Lys Glu Met Ile Leu Ala
           35           40           45
Lys Arg Phe Phe Phe Ile Val Phe Thr Asp Ala Leu Cys Trp Ile Pro
           50           55           60
Ile Phe Val Val Lys Phe Leu Ser Leu Leu Gln Val Glu Ile Pro Gly
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145 150

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120  
ctcatcatcc ttcaaaactt gtggtggaac agggttttct tccctgtctg tgtattttga  
180  
gccagcacag ttaccaaagt tgaacttgct ttctgcttgt gaacggttgt ggtcattgtg  
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&lt;210&gt; 2584

&lt;211&gt; 1186

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2584

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			85				90						95		
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		100					105						110		
Asp	Asn	Asp	Glu	Pro	Gly	Asp	Glu	Asp	Glu	Glu	Asp	Glu	Glu	Gly	Asp

```

      115      120      125
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130      135      140
Asp Gly Glu Asp Val Glu Asp Glu Glu Glu Glu Glu Glu Glu Glu
145      150      155      160
Glu Glu Glu Glu Glu Glu Glu Asn Glu Asp His Gln Met Asn Cys His
      165      170      175
Asn Thr Arg Ile Met Gln Asp Thr Glu Lys Asp Asp Asn Asn Ser Asp
180      185      190
Glu Tyr Asp Asn Tyr Asp Glu Leu Val Ala Lys Ser Leu Leu Asn Leu
195      200      205
Gly Lys Ile Ala Glu Asp Ala Ala Tyr Arg Ala Arg Thr Glu Ser Glu
210      215      220
Met Asn Ser Asn Thr Ser Asn Ser Leu Glu Asp Asp Ser Asp Lys Asn
225      230      235      240
Glu Asn Leu Gly Arg Lys Ser Glu Leu Ser Leu Asp Leu Asp Ser Asp
      245      250      255
Val Val Arg Glu Thr Val Asp Ser Leu Lys Leu Leu Ala Gln Gly His
260      265      270
Gly Val Val Leu Ser Glu Asn Met Asn Asp Arg Asn Tyr Ala Asp Ser
275      280      285
Met Ser Gln Gln Asp Ser Arg Asn Met Asn Tyr Val Met Leu Gly Lys
290      295      300
Pro Met Asn Asn Gly Leu Met Glu Lys Met Val Glu Glu Ser Asp Glu
305      310      315      320
Glu Val Cys Leu Ser Ser Leu Glu Cys Leu Arg Asn Gln Cys Phe Asp
      325      330      335
Leu Ala Arg Lys Leu Ser Glu Thr Asn Pro Gln Glu Arg Asn Pro Gln
340      345      350
Gln Asn Met Asn Ile Arg Gln His Val Arg Pro Glu Glu Asp Phe Pro
355      360      365
Gly Arg Thr Pro Asp Arg Asn Tyr Ser Asp Met Leu Asn Leu Met Arg
370      375      380
Leu Glu Glu Gln Leu Ser Pro Arg Ser Arg Val Phe Ala Ser Cys Ala
385      390      395      400
Lys Glu Asp Gly Cys His Glu Arg Asp Asp Thr Thr Ser Val Asn
      405      410      415
Ser Asp Arg Ser Glu Glu Val Phe Asp Met Thr Lys Gly Asn Leu Thr
420      425      430
Leu Leu Glu Lys Ala Ile Ala Leu Glu Thr Glu Arg Ala Lys Ala Met
435      440      445
Arg Glu Lys Met Ala Met Glu Ala Gly Arg Arg Asp Asn Met Arg Ser
450      455      460
Tyr Glu Asp Gln Ser Pro Arg Gln Leu Pro Gly Glu Asp Arg Lys Pro
465      470      475      480
Lys Ser Ser Asp Ser His Val Lys Lys Pro Tyr Tyr Gly Lys Asp Pro
      485      490      495
Ser Arg Thr Glu Lys Lys Glu Ser Lys Cys Pro Thr Pro Gly Cys Asp
500      505      510
Gly Thr Gly His Val Thr Gly Leu Tyr Pro His His Arg Ser Leu Ser
515      520      525
Gly Cys Pro His Lys Asp Arg Val Pro Pro Glu Ile Leu Ala Met His
530      535      540
Glu Ser Val Leu Lys Cys Pro Thr Pro Gly Cys Thr Gly Arg Gly His

```

545						550									555								560
Val	Asn	Ser	Asn	Arg	Asn	Ser	His	Arg	Ser	Leu	Ser	Gly	Cys	Pro	Ile								
					565						570						575						
Ala	Ala	Ala	Glu	Lys	Leu	Ala	Lys	Ala	Gln	Glu	Lys	His	Gln	Ser	Cys								
					580						585						590						
Asp	Val	Ser	Lys	Ser	Ser	Gln	Ala	Ser	Asp	Arg	Val	Leu	Arg	Pro	Met								
					595						600						605						
Cys	Phe	Val	Lys	Gln	Leu	Glu	Ile	Pro	Gln	Tyr	Gly	Arg	Asn	Asn									
					610						615						620						
Val	Pro	Thr	Thr	Thr	Pro	Arg	Ser	Asn	Leu	Ala	Lys	Glu	Leu	Glu	Lys								
					625						630						635						
Tyr	Ser	Lys	Thr	Ser	Phe	Glu	Tyr	Asn	Ser	Tyr	Asp	Asn	His	Thr	Tyr								
					645						650						655						
Gly	Lys	Arg	Ala	Ile	Ala	Pro	Lys	Val	Gln	Thr	Arg	Asp	Ile	Ser	Pro								
					660						665						670						
Lys	Gly	Tyr	Asp	Asp	Ala	Lys	Arg	Tyr	Cys	Lys	Asp	Pro	Ser	Pro	Ser								
					675						680						685						
Ser	Ser	Ser	Thr	Ser	Ser	Tyr	Ala	Pro	Ser	Ser	Ser	Ser	Asn	Leu	Ser								
					690						695						700						
Cys	Gly	Gly	Gly	Ser	Ser	Ala	Ser	Ser	Thr	Cys	Ser	Lys	Ser	Ser	Phe								
					705						710						715						
Asp	Tyr	Thr	His	Asp	Met	Glu	Ala	Ala	His	Met	Ala	Ala	Thr	Ala	Ile								
					725						730						735						
Leu	Asn	Leu	Ser	Thr	Arg	Cys	Arg	Glu	Met	Pro	Gln	Asn	Leu	Ser	Thr								
					740						745						750						
Lys	Pro	Gln	Asp	Leu	Cys	Ala	Thr	Arg	Asn	Pro	Asp	Met	Glu	Val	Asp								
					755						760						765						
Glu	Asn	Gly	Thr	Leu	Asp	Leu	Ser	Met	Asn	Lys	Gln	Arg	Pro	Arg	Asp								
					770						775						780						
Ser	Cys	Cys	Pro	Ile	Leu	Thr	Pro	Leu	Glu	Pro	Met	Ser	Pro	Gln	Gln								
					785						790						795						
Gln	Ala	Val	Met	Asn	Asn	Arg	Cys	Phe	Gln	Leu	Gly	Glu	Gly	Asp	Cys								
					805						810						815						
Trp	Asp	Leu	Pro	Val	Asp	Tyr	Thr	Lys	Met	Lys	Pro	Arg	Arg	Ile	Asp								
					820						825						830						
Glu	Asp	Glu	Ser	Lys	Asp	Ile	Thr	Pro	Glu	Asp	Leu	Asp	Pro	Phe	Gln								
					835						840						845						
Glu	Ala	Leu	Glu	Glu	Arg	Arg	Tyr	Pro	Gly	Glu	Val	Thr	Ile	Pro	Ser								
					850						855						860						
Pro	Lys	Pro	Lys	Tyr	Pro	Gln	Cys	Lys	Glu	Ser	Lys	Lys	Asp	Leu	Ile								
					865						870						875						
Thr	Leu	Ser	Gly	Cys	Pro	Leu	Ala	Asp	Lys	Ser	Ile	Arg	Ser	Met	Leu								
					885						890						895						
Ala	Thr	Ser	Ser	Gln	Glu	Leu	Lys	Cys	Pro	Thr	Pro	Gly	Cys	Asp	Gly								
					900						905												

980 985 990  
 Ser Gln Phe Ser Trp Lys Ser Val Lys Thr Glu Gly Met Ser Cys Pro  
 995 1000 1005  
 Thr Pro Gly Cys Asp Gly Ser Gly His Val Ser Gly Ser Phe Leu Thr  
 1010 1015 1020  
 His Arg Ser Leu Ser Gly Cys Pro Arg Ala Thr Ser Ala Met Lys Lys  
 1025 1030 1035 1040  
 Ala Lys Leu Ser Gly Glu Gln Met Leu Thr Ile Lys Gln Arg Ala Ser  
 1045 1050 1055  
 Asn Gly Ile Glu Asn Asp Glu Glu Ile Lys Gln Leu Asp Glu Glu Ile  
 1060 1065 1070  
 Lys Glu Leu Asn Glu Ser Asn Ser Gln Met Glu Ala Asp Met Ile Lys  
 1075 1080 1085  
 Leu Arg Thr Gln Ile Thr Thr Met Glu Ser Asn Leu Lys Thr Ile Glu  
 1090 1095 1100  
 Glu Glu Asn Lys Val Ile Glu Gln Gln Asn Glu Ser Leu Leu His Glu  
 1105 1110 1115 1120  
 Leu Ala Asn Leu Ser Gln Ser Leu Ile His Ser Leu Ala Asn Ile Gln  
 1125 1130 1135  
 Leu Pro His Met Asp Pro Ile Asn Glu Gln Asn Phe Asp Ala Tyr Val  
 1140 1145 1150  
 Thr Thr Leu Thr Glu Met Tyr Thr Asn Gln Asp Arg Tyr Gln Ser Pro  
 1155 1160 1165  
 Glu Asn Lys Ala Leu Leu Glu Asn Ile Lys Gln Ala Val Arg Gly Ile  
 1170 1175 1180  
 Gln Val  
 1185

<210> 2585

<211> 542

<212> DNA

<213> Homo sapiens

<400> 2585

cactcactcc tccacagaat ttggcctcag ccagcccccac gctcagcatg cccagccctg  
 60  
 ccaagagccc agggatcgcc tcgctgacag accccaaaac acggggccacg ccaccccgtc  
 120  
 ctctaggtac ctgtgcccc agtctcaagc atcactccgt gtctccctca catgccttct  
 180  
 gggcctctag ccctcaaaga gctaaagtat gtgagcactt tctcagccct ttaaaccgat  
 240  
 taagtcatgt catcctcaca aggctgctgt gttttattac ctctgtttca ggtgcaagtc  
 300  
 atccccggga ggagtgggtg ggatgccgcc tgacctggg ccacctgggt gcagcatctg  
 360  
 tgttgatgac caccctctg cctcaggett tgctcctgaa tggtcttgct ctctaggtct  
 420  
 gtccgctctt ggcctctctc ttcttaactc cgttcaagcc ccctgggtca caggtccatg  
 480  
 ctcatcactt caatgacgcg gatgctggcg atccccaaat ctctaatcc aagtgcagat  
 540  
 ct  
 542

<210> 2586  
 <211> 122  
 <212> PRT  
 <213> Homo sapiens

<400> 2586  
 Met Pro Ser Pro Ala Lys Ser Pro Gly Ile Ala Ser Leu Thr Asp Pro  
           1                  5                  10                  15  
 Lys Thr Arg Ala Thr Pro Pro Arg Pro Leu Gly Thr Cys Ala Pro Ser  
                   20                  25                  30  
 Leu Lys His His Ser Val Ser Pro Ser His Ala Phe Trp Ala Ser Ser  
           35                  40                  45  
 Pro Gln Arg Ala Lys Val Cys Glu His Phe Leu Ser Pro Leu Asn Gly  
           50                  55                  60  
 Leu Ser His Val Ile Leu Thr Arg Leu Leu Cys Phe Ile Thr Ser Val  
           65                  70                  75                  80  
 Ser Gly Ala Ser His Pro Arg Glu Glu Trp Trp Gly Cys Arg Leu Thr  
                   85                  90                  95  
 Leu Gly His Leu Ala Ala Ala Ser Val Leu Met Thr Thr Leu Leu Pro  
           100                  105                  110  
 Gln Ala Leu Leu Leu Asn Val Leu Ala Leu  
           115                  120

<210> 2587  
 <211> 435  
 <212> DNA  
 <213> Homo sapiens

<400> 2587  
 ncgaatatcc atgcagcgat cccgggcgga atgctctcca acatggagtc ccagcttgag  
           60  
 gccacgggcy ctggagaccg catggatgag gtcataaagg aggtgccgcy cgttcgtaag  
           120  
 gatgccggct acccgccgct ggtaaccccc tcgtcccaga tcgtgggaac ccaggcgggtg  
           180  
 ttcaacgtct tgatgggcaa tggttcgtac aagaatctca ctgccgagtt tgccgacctc  
           240  
 atgctcggct actacggcaa gccattggc gagctcaatc ctgagatcgt cgagatggcc  
           300  
 aagaagcaga ccggcaagga gccgatcgac tgccgtcccc cgaacttgct cgagcctgag  
           360  
 tgggatcagt tggtcgagca ggccaagagt cttgagggtc tcgacggctc cgacgaggac  
           420  
 gttctttacca acgcy  
           435

<210> 2588  
 <211> 145  
 <212> PRT  
 <213> Homo sapiens

<400> 2588  
 Xaa Asn Ile His Ala Ala Ile Pro Gly Gly Met Leu Ser Asn Met Glu

```

      1           5           10           15
Ser Gln Leu Glu Ala Gln Gly Ala Gly Asp Arg Met Asp Glu Val Met
      20           25           30
Lys Glu Val Pro Arg Val Arg Lys Asp Ala Gly Tyr Pro Pro Leu Val
      35           40           45
Thr Pro Ser Ser Gln Ile Val Gly Thr Gln Ala Val Phe Asn Val Leu
      50           55           60
Met Gly Asn Gly Ser Tyr Lys Asn Leu Thr Ala Glu Phe Ala Asp Leu
      65           70           75           80
Met Leu Gly Tyr Tyr Gly Lys Pro Ile Gly Glu Leu Asn Pro Glu Ile
      85           90           95
Val Glu Met Ala Lys Lys Gln Thr Gly Lys Glu Pro Ile Asp Cys Arg
      100          105          110
Pro Ala Asp Leu Leu Glu Pro Glu Trp Asp Gln Leu Val Glu Gln Ala
      115          120          125
Lys Ser Leu Glu Gly Phe Asp Gly Ser Asp Glu Asp Val Leu Thr Asn
      130          135          140
Ala
145

```

&lt;210&gt; 2589

&lt;211&gt; 366

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2589

```

ccggcgaaga aggacatggc catggtcttc ggcgcgactc attacgtcga cccgacggcc
60
ggcgatccgg ttgagcagat cagagcgctg accagggggc gcggcgctcga tttcgcgatac
120
gagggtcgctg gcatcgctcga ggtcatggag caggcctact gggcgggcgcg acgcggcgggc
180
acgatcgctct acgtcggggc gctgggcatc gacgccaaagc tggctcctgcc ggcgaaacgac
240
ctgcacggcg gcgccaagac gatcatcggc tgcgccaaacg gattggggcgc agtgcgcacc
300
gactatgccca agatgatctc gctggctcgag accgggacggc tggacctggg cgggatgatac
360
acgcgt
366

```

&lt;210&gt; 2590

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2590

```

Pro Ala Lys Lys Asp Met Ala Met Val Phe Gly Ala Thr His Tyr Val
      1           5           10           15
Asp Pro Thr Ala Gly Asp Pro Val Glu Gln Ile Arg Ala Leu Thr Arg
      20           25           30
Gly Arg Gly Val Asp Phe Ala Ile Glu Val Val Gly Ile Val Glu Val
      35           40           45
Met Glu Gln Ala Tyr Trp Ala Ala Arg Arg Gly Gly Thr Ile Val Tyr

```

```

      50              55              60
Val Gly Ala Leu Gly Ile Asp Ala Lys Leu Val Leu Pro Ala Asn Asp
65              70              75              80
Leu His Gly Gly Ala Lys Thr Ile Ile Gly Cys Ala Asn Gly Leu Gly
      85              90              95
Ala Val Arg Thr Asp Tyr Ala Lys Met Ile Ser Leu Val Glu Thr Gly
      100              105              110
Arg Leu Asp Leu Gly Gly Met Ile Thr Arg
      115              120

```

<210> 2591  
 <211> 341  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2591
acgcgtaaag gcatgacctc accttatcat cagggtcaca cgtgtgttat tctggggctg
60
agcagcccac gagttgtcca gcaccaggcc aggggtcagt cagcaatgag gacagctcct
120
tcctgtctcca gggcaggccc tgggcagggc aatgctgggg acacgggtggg gagtaggcca
180
cagcttctgt gggggagttc ctatggcagg aggatcatgc ccagcagcgt ggaagagcaa
240
ggggtgaccc tgcactcgag gctcctggga agacggggag ggttgaggtt acatgagggg
300
gaggggtcag ttggtgcatt cacagaacag cagggtggcc a
341

```

<210> 2592  
 <211> 109  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2592
Met Thr Ser Pro Tyr His Gln Gly His Thr Cys Val Ile Leu Gly Leu
1      5      10      15
Ser Ser Pro Arg Val Val Gln His Gln Ala Arg Gly Gln Ser Ala Met
      20      25      30
Arg Thr Ala Pro Ser Cys Ser Arg Ala Gly Pro Gly Gln Gly Asn Ala
      35      40      45
Gly Asp Thr Val Gly Ser Arg Pro Gln Leu Leu Trp Gly Ser Ser Tyr
      50      55      60
Gly Arg Arg Ile Met Pro Ser Ser Val Glu Glu Gln Gly Val Thr Leu
65      70      75      80
His Ser Arg Leu Leu Gly Arg Arg Gly Gly Leu Arg Leu His Glu Gly
      85      90      95
Glu Gly Ser Val Gly Ala Phe Thr Glu Gln Gln Gly Gly
      100      105

```

<210> 2593  
 <211> 501  
 <212> DNA  
 <213> Homo sapiens



<400> 2593  
 cgcgtaaggc caccagaaga tttttatgca cagattccgt tgcttcgaga gctaatttcg  
 60  
 gcgctttcat ggggttttat ggaggtggat gaatatgagg cggatgatat ttcggtacc  
 120  
 ttggcgcc aagcggatga agcgggggat tatatgactt atattgtgtc ttcggacctc  
 180  
 gatatgctgc aaatcgtaga tgaaaacacc aagatgtatc gaattctgcg gggattttcg  
 240  
 gatctcgagg agatggatac tccagcgatt gaagaaaaat atggaatctt gaagtcgcaa  
 300  
 tttttggacc tgaaggcgct gaagggggat aattcggata atattccagg cgtaccaggg  
 360  
 attggtgaga aaaccgcagt gaaactcttg aatgagtatg gtagcttgga ggggatttat  
 420  
 aatcatatca aggaaatttc gggggcgaca cagaagaaat tgattgctgg acgcgaatca  
 480  
 gctgagatgt ctcttaagct t  
 501

<210> 2594  
 <211> 167  
 <212> PRT  
 <213> Homo sapiens

<400> 2594  
 Arg Val Arg Pro Pro Glu Asp Phe Tyr Ala Gln Ile Pro Leu Leu Arg  
 1 5 10 15  
 Glu Leu Ile Ser Ala Leu Ser Trp Gly Phe Met Glu Val Asp Glu Tyr  
 20 25 30  
 Glu Ala Asp Asp Ile Ile Gly Thr Leu Ala Arg Gln Ala Asp Glu Ala  
 35 40 45  
 Gly Asp Tyr Met Thr Tyr Ile Val Ser Ser Asp Leu Asp Met Leu Gln  
 50 55 60  
 Ile Val Asp Glu Asn Thr Lys Met Tyr Arg Ile Leu Arg Gly Phe Ser  
 65 70 75 80  
 Asp Leu Glu Glu Met Asp Thr Pro Ala Ile Glu Glu Lys Tyr Gly Ile  
 85 90 95  
 Leu Lys Ser Gln Phe Leu Asp Leu Lys Ala Leu Lys Gly Asp Asn Ser  
 100 105 110  
 Asp Asn Ile Pro Gly Val Pro Gly Ile Gly Glu Lys Thr Ala Val Lys  
 115 120 125  
 Leu Leu Asn Glu Tyr Gly Ser Leu Glu Gly Ile Tyr Asn His Ile Lys  
 130 135 140  
 Glu Ile Ser Gly Ala Thr Gln Lys Lys Leu Ile Ala Gly Arg Glu Ser  
 145 150 155 160  
 Ala Glu Met Ser Leu Lys Leu  
 165

<210> 2595  
 <211> 928  
 <212> DNA  
 <213> Homo sapiens

<400> 2595  
 agatcttcca gatgcaacaa tgatcaatta agacacgcgg cgacatgggtg gccctgcct  
 60  
 cccccccag ggatacctgt aatacctgct tcccacttca tgggctacaa tctcatgctg  
 120  
 gtcacaattt ctggggctca ctcatataac accaacaat gggatatttg tgaagaactt  
 180  
 cgctgcggg agcttgaaga agtcaaggcc agagctgctc agatggaaaa gaccatgcgg  
 240  
 tgggtggtcgg actgcactgc caactggaga gaaaaatgga gtaaagtctg agctgaaagg  
 300  
 aacagtgccg gaaaggaagg aagacaactc agaataaaac tagagatggc gatgaaagaa  
 360  
 tcggatccac tgaacagaa acagagtttg ccacttcaga aggaggcatt agaagctaata  
 420  
 gttacccagg atctgaagct tctgggcttc gtagaagaat cctgtgaaca tacagaccaa  
 480  
 tttcaattga gttcacaat gcctgagctc atcagagagt atttggtaaa aagacaattt  
 540  
 tctacaaagg aggacacaaa taataaggaa caagggtggtg ttattgattc tctaaaatta  
 600  
 agtgaggaga tgaagcccaa tctagatggt gttgatttat tcaacaatgg tggttctgga  
 660  
 aacggtgaaa cgaaaactgg gctgagactg aaagcaataa atctgccttt ggaaaatgaa  
 720  
 gtaactgaaa tttcagcttt gcaggtgcat ttggatgaat tccaaaaaat cttatggaag  
 780  
 gaaagagaaa tgcgcacagc tttggaaaaa gaaatagaga gactggagtc ggctttgtct  
 840  
 ctgtggaagt ggaagtatga agaactgaaa gaatcaaagc caaaaaatgt gaaagagttt  
 900  
 gacattcttc ttggtcaaca taatgatg  
 928

<210> 2596

<211> 309

<212> PRT

<213> Homo sapiens

<400> 2596  
 Arg Ser Ser Arg Cys Asn Asn Asp Gln Leu Arg His Ala Ala Thr Trp  
 1 5 10 15  
 Trp Pro Leu Pro His Pro Pro Gly Ile Pro Val Ile Pro Ala Ser His  
 20 25 30  
 Phe Met Gly Tyr Asn Leu Met Leu Val Thr Ile Ser Gly Ala His Ser  
 35 40 45  
 Tyr Asn Thr Asn Lys Trp Asp Ile Cys Glu Glu Leu Arg Leu Arg Glu  
 50 55 60  
 Leu Glu Glu Val Lys Ala Arg Ala Ala Gln Met Glu Lys Thr Met Arg  
 65 70 75 80  
 Trp Trp Ser Asp Cys Thr Ala Asn Trp Arg Glu Lys Trp Ser Lys Val  
 85 90 95  
 Arg Ala Glu Arg Asn Ser Ala Gly Lys Glu Gly Arg Gln Leu Arg Ile

```

      100      105      110
Lys Leu Glu Met Ala Met Lys Glu Ser Asp Pro Leu Lys Gln Lys Gln
  115      120      125
Ser Leu Pro Leu Gln Lys Glu Ala Leu Glu Ala Asn Val Thr Gln Asp
  130      135      140
Leu Lys Leu Pro Gly Phe Val Glu Glu Ser Cys Glu His Thr Asp Gln
  145      150      155      160
Phe Gln Leu Ser Ser Gln Met His Glu Ser Ile Arg Glu Tyr Leu Val
      165      170      175
Lys Arg Gln Phe Ser Thr Lys Glu Asp Thr Asn Asn Lys Glu Gln Gly
      180      185      190
Val Val Ile Asp Ser Leu Lys Leu Ser Glu Glu Met Lys Pro Asn Leu
      195      200      205
Asp Gly Val Asp Leu Phe Asn Asn Gly Gly Ser Gly Asn Gly Glu Thr
      210      215      220
Lys Thr Gly Leu Arg Leu Lys Ala Ile Asn Leu Pro Leu Glu Asn Glu
      225      230      235      240
Val Thr Glu Ile Ser Ala Leu Gln Val His Leu Asp Glu Phe Gln Lys
      245      250      255
Ile Leu Trp Lys Glu Arg Glu Met Arg Thr Ala Leu Glu Lys Glu Ile
      260      265      270
Glu Arg Leu Glu Ser Ala Leu Ser Leu Trp Lys Trp Lys Tyr Glu Glu
      275      280      285
Leu Lys Glu Ser Lys Pro Lys Asn Val Lys Glu Phe Asp Ile Leu Leu
      290      295      300
Gly Gln His Asn Asp
305

```

&lt;210&gt; 2597

&lt;211&gt; 631

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2597

```

ccatgggtgg gaatgcaaga gacacactct agacttacta gaggagcaag agcaggactt
60
ggctgcacct gcagctgagg gttagcagga attaggagat aacagtagaa tagggctaga
120
ctgaaaaggc ctttgatgcc aggttaggaa atttacattt tatccacaaa atccaaatcc
180
tcctttaata atgagatgtc ttacaagtt tttgggcaag agtgggtatgg ctgacctggt
240
gtcctgggaa ggaactgtgt ggggatgggtg tgcaggactt acctaggggtg ggaaaggcac
300
aagcagcatg gggctgtggc agctaccaga ggtaaaggga catttcaggg aaagacttgg
360
caggacaaga ccttccttgg atggatggat gaataccaga aacagggacc caagagaaag
420
gccgagtttc atagggagag aagatgggtc atgtatgagg catgttgagc ttgtactgat
480
ggtgagacgt ccagtcgaca gtactaccca ctggccagtg agaaatgtgg gaccagggtt
540
caggaggaaa ctggggccgg aaatgagcat ttggaaggcg ccagggtgga agcgggtggt
600

```

tcactccacg agtgctattt cacttacgcg t  
631

<210> 2598  
<211> 108  
<212> PRT  
<213> Homo sapiens

<400> 2598  
Met Gly Leu Trp Gln Leu Pro Glu Val Lys Gly His Phe Arg Glu Arg  
1 5 10 15  
Leu Gly Arg Thr Arg Pro Ser Leu Asp Gly Trp Met Asn Thr Arg Asn  
20 25 30  
Arg Asp Pro Arg Glu Arg Pro Ser Phe Ile Gly Arg Glu Asp Gly Ser  
35 40 45  
Cys Met Arg His Val Glu Leu Val Leu Met Val Arg Arg Pro Val Asp  
50 55 60  
Ser Thr Thr His Trp Pro Val Arg Asn Val Gly Pro Gly Phe Arg Arg  
65 70 75 80  
Lys Leu Gly Pro Glu Met Ser Ile Trp Lys Ala Pro Gly Trp Lys Arg  
85 90 95  
Val Val His Ser Thr Ser Ala Ile Ser Leu Thr Arg  
100 105

<210> 2599  
<211> 356  
<212> DNA  
<213> Homo sapiens

<400> 2599  
nagatcttat acagggacgt gatgttggag aactactgga accttggttc tctgggactg  
60  
tgtcattttg atatgaatat tatctccatg ttggaggaag ggaaagagcc ctggactgtg  
120  
aagagctgtg tgaaaatagc aagaaaacca agaacgcggg aatgtgtcaa aggcgtggtc  
180  
acagatatcc ctctaaatg tacaatcaag gatttgctac caaaagagaa gagcagtaca  
240  
gaagcagtat tccacacagt ggtgttggaa agacacgaaa gccctgacat tgaagacttt  
300  
tccttcaagg aaccccagaa aaatgtgcat gattttgagt gtcaatggag agatgn  
356

<210> 2600  
<211> 118  
<212> PRT  
<213> Homo sapiens

<400> 2600  
Xaa Ile Leu Tyr Arg Asp Val Met Leu Glu Asn Tyr Trp Asn Leu Val  
1 5 10 15  
Ser Leu Gly Leu Cys His Phe Asp Met Asn Ile Ile Ser Met Leu Glu  
20 25 30  
Glu Gly Lys Glu Pro Trp Thr Val Lys Ser Cys Val Lys Ile Ala Arg

```

      35          40          45
Lys Pro Arg Thr Arg Glu Cys Val Lys Gly Val Val Thr Asp Ile Pro
  50          55          60
Pro Lys Cys Thr Ile Lys Asp Leu Leu Pro Lys Glu Lys Ser Ser Thr
  65          70          75          80
Glu Ala Val Phe His Thr Val Val Leu Glu Arg His Glu Ser Pro Asp
      85          90          95
Ile Glu Asp Phe Ser Phe Lys Glu Pro Gln Lys Asn Val His Asp Phe
      100          105          110
Glu Cys Gln Trp Arg Asp
      115

```

&lt;210&gt; 2601

&lt;211&gt; 329

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2601

```

gcgccgatca tgatctacgg cgacgacgtc acccacctgc tcaccgaaga aggcacgcgc
  60
tacttgtaca aggcgcgttc cctggaagag cgccaagcga tgatcgccgg cgggtggtggg
  120
gtcacgcgct tcggcttgcg ccacaacccc aaggacactg cgcgcatgcg ccgcgaaggg
  180
ttgatcgctt tgcccgaaga cctcggtatc cgccgcaccg acgccaccgg cgaactgttg
  240
gccgccaaga gcgtggcgga cctggtggag tgggccgggt gcttgtgcaa cccgccccgc
  300
aagttcagga gctggtaaat gcgcgcct
  329

```

&lt;210&gt; 2602

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2602

```

Ala Pro Ile Met Ile Tyr Gly Asp Asp Val Thr His Leu Leu Thr Glu
  1          5          10          15
Glu Gly Ile Ala Tyr Leu Tyr Lys Ala Arg Ser Leu Glu Glu Arg Gln
      20          25          30
Ala Met Ile Ala Gly Gly Gly Gly Val Thr Ala Phe Gly Leu Arg His
      35          40          45
Asn Pro Lys Asp Thr Ala Arg Met Arg Arg Glu Gly Leu Ile Ala Leu
      50          55          60
Pro Glu Asp Leu Gly Ile Arg Arg Thr Asp Ala Thr Arg Glu Leu Leu
      65          70          75          80
Ala Ala Lys Ser Val Ala Asp Leu Val Glu Trp Ser Gly Gly Leu Cys
      85          90          95
Asn Pro Pro Ala Lys Phe Arg Ser Trp
      100          105

```

&lt;210&gt; 2603

&lt;211&gt; 423

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2603

tcatgatcca ttgctctacc ctttacgggt gtgcacctac gccaggtcg gtggtcagga  
 60  
 gcatcggttc ggtggtaccg aggtcgagga cttccttcac gccgttggtc gcggagggca  
 120  
 ggttggtgga agtggtcagg tgggccacga tctgggcact gatcacctcg gtgaaatcga  
 180  
 agctctggtt accctgagcg gtgcgcgaca cgacacggtc cacaccggag accagaccga  
 240  
 tctcggagat gatcgcgtaa ctttcattgt cgtagaggat cttgcacgca tcgatgatgc  
 300  
 gcttgatctc cttggcagtg aagatgattt ccacggggtt gttggccgac agatactgac  
 360  
 cggagctggt ggtcacctgg gtggaatcca ggtcatccgg aaccgggttc aggttggtccg  
 420  
 cgg  
 423

&lt;210&gt; 2604

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2604

Met	Glu	Ile	Ile	Phe	Thr	Ala	Lys	Glu	Ile	Lys	Arg	Ile	Ile	Asp	Ala
1				5				10						15	
Cys	Lys	Ile	Leu	Tyr	Asp	Asn	Glu	Gly	Tyr	Ala	Ile	Ile	Ser	Glu	Ile
			20					25					30		
Gly	Leu	Val	Ser	Gly	Val	Asp	Arg	Val	Val	Ser	Ala	Thr	Ala	Gln	Gly
		35				40					45				
Asn	Gln	Ser	Phe	Asp	Phe	Thr	Glu	Val	Ile	Ser	Ala	Gln	Ile	Val	Ala
		50				55					60				
His	Leu	Thr	Thr	Tyr	His	Asn	Leu	Pro	Ser	Ala	Asn	Asn	Gly	Val	Lys
		65			70					75				80	
Glu	Val	Leu	Asp	Leu	Gly	Thr	Thr	Glu	Pro	Met	Leu	Leu	Thr	Thr	Asp
			85					90						95	
Leu	Gly	Val	Gly	Ala	Gln	Pro									
			100												

&lt;210&gt; 2605

&lt;211&gt; 354

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2605

ngggaggag ggcattgtcaa aagcgactgt atccagaggg ttgatttaa acatttttca  
 60  
 aaacatatgt ggcaaacagc ggggggaggg gatctcacca acgtttttct ccactttctc  
 120  
 tttgcatgct gggacctgtt ccactttcaa aatgtgtcat ttgggaagga aaggaggagaa  
 180

caactacttg aaaggaatac acgtcagtat gagccctttc tcctcagcag aaggttgccc  
 240  
 caaagtacct cctctgaggc gagagaaagg agagaggagg agagacagct ttcacaaat  
 300  
 ggggcaccca ggactctagg gagagaggca cgttctcaca aaggcccttt gagc  
 354

<210> 2606  
 <211> 101  
 <212> PRT  
 <213> Homo sapiens

<400> 2606  
 Met Ser Lys Ala Thr Val Ser Arg Gly Phe Asp Leu Asn Ile Phe Gln  
 1 5 10 15  
 Asn Ile Cys Gly Lys Gln Arg Gly Glu Gly Ile Ser Pro Thr Phe Phe  
 20 25 30  
 Ser Thr Ser Ser Leu His Ala Gly Thr Cys Ser Thr Phe Lys Met Cys  
 35 40 45  
 His Phe Gly Arg Lys Gly Arg Asn Asn Tyr Leu Lys Gly Ile His Val  
 50 55 60  
 Ser Met Ser Pro Phe Ser Ala Glu Gly Cys Pro Lys Val Pro Pro  
 65 70 75 80  
 Leu Arg Arg Glu Lys Gly Glu Arg Arg Arg Asp Ser Phe His Gln Met  
 85 90 95  
 Gly His Pro Gly Leu  
 100

<210> 2607  
 <211> 297  
 <212> DNA  
 <213> Homo sapiens

<400> 2607  
 tgatcaagaa caatgatacg ataccctaac caacagagga agcaacggaa gttgttgttg  
 60  
 tttttatgct gttttttttt ttgagaacg gatcttgccc ctgccccag gccggaatgg  
 120  
 atgacatgga cagaaccccc tcggaaaaaa gccggaatgt gcaaacccaa attcccacca  
 180  
 cacggggggc ctaacaattg gatccatccc cnaaaaaanc cntnncaaaa aaagntaaaa  
 240  
 actttttttt ttttaannn anacccccaa aaaaaccaa aaaaaaatt taaaaaa  
 297

<210> 2608  
 <211> 95  
 <212> PRT  
 <213> Homo sapiens

<400> 2608  
 Met Ile Arg Tyr Pro Asn Gln Gln Arg Lys Gln Arg Lys Leu Leu Leu  
 1 5 10 15  
 Phe Leu Cys Cys Phe Phe Phe Leu Arg Thr Asp Leu Ala Pro Ala Pro

20					25					30					
Arg	Pro	Glu	Trp	Met	Thr	Trp	Thr	Glu	Pro	Arg	Arg	Lys	Lys	Ala	Gly
35					40					45					
Met	Cys	Lys	Pro	Lys	Phe	Pro	Pro	His	Gly	Gly	Pro	Asn	Asn	Trp	Ile
50					55					60					
His	Pro	Xaa	Lys	Xaa	Pro	Xaa	Gln	Lys	Lys	Xaa	Lys	Thr	Phe	Phe	Phe
65					70					75					
Leu	Xaa	Xaa	Xaa	Pro	Gln	Lys	Asn	Gln	Lys	Lys	Lys	Phe	Lys	Lys	
85					90					95					

```
<210> 2609
<211> 305
<212> DNA
<213> Homo sapiens
```

```
<400> 2609
ncgccatcgg catgatgtca ggcaaagatg atcctggcat ggcaaaggta tacggttttg
60
ttgacacgtc cctgacgata cctatccgct catctggaga cccatgcgtt ccttggaccc
120
caattgccta cgaaaaaatt ttttttttcc ccccaaaaa acaccccccc ctcgcatctg
180
tgaaagtctt acctcggggg cgtcatctcg gctgtcatcg tcggcaaata actcagctgg
240
cgtaccctt cgtcatcgcc cggggccaccg acctcgacgg cncagcgtgc acggcaacga
300
ccacc
305
```

```
<210> 2610
<211> 98
<212> PRT
<213> Homo sapiens
```

[illegible]

```
<210> 2611
<211> 342
<212> DNA
<213> Homo sapiens
```



<400> 2611  
 gccgccgcga tcgacggcga ctccctcgacc agctgggtgt ccagctcgct gcaaaccgct  
 60  
 gtgggggcaat ggcttcaggt ggacttcgac catccgggtga ccaacgcgac catcaccttg  
 120  
 acgcccacg cccacgctgt cggagctcag gtgcgccgcy tcgaggtggc aacagccaac  
 180  
 ggccaccagca caattcgctt cgaccagccc ggcaagccgc tgacggcggc gctgccctac  
 240  
 ggcgagacct catgggtccg gttcaccgcg accggcaccg acgacggctc ccccggcggtg  
 300  
 cagttcggca tcaccgactt ctccgtgacg cagtacgacg cg  
 342

<210> 2612  
 <211> 114  
 <212> PRT  
 <213> Homo sapiens

<400> 2612  
 Ala Ala Ala Ile Asp Gly Asp Ser Ser Thr Ser Trp Val Ser Ser Ser  
 1 5 10 15  
 Leu Gln Thr Ala Val Gly Gln Trp Leu Gln Val Asp Phe Asp His Pro  
 20 25 30  
 Val Thr Asn Ala Thr Ile Thr Leu Thr Pro Ser Ala Thr Ala Val Gly  
 35 40 45  
 Ala Gln Val Arg Arg Val Glu Val Ala Thr Ala Asn Gly Thr Ser Thr  
 50 55 60  
 Ile Arg Phe Asp Gln Pro Gly Lys Pro Leu Thr Ala Ala Leu Pro Tyr  
 65 70 75 80  
 Gly Glu Thr Ser Trp Val Arg Phe Thr Ala Thr Gly Thr Asp Asp Gly  
 85 90 95  
 Ser Pro Gly Val Gln Phe Gly Ile Thr Asp Phe Ser Val Thr Gln Tyr  
 100 105 110  
 Asp Ala

<210> 2613  
 <211> 414  
 <212> DNA  
 <213> Homo sapiens

<400> 2613  
 acgcgtgtgg gttgtgcaca gggcatggct gctctggaca ggctggggc ctgggcatca  
 60  
 ttctctcct ccaaaagggt agggctctgac ctaatggtag tttgtctgat gttttccaga  
 120  
 tatgcccccta ctgggaaggg ccaagtgggc aggcagagtc tgggggtggag cgaggtgggg  
 180  
 ctgggaagca ctctgcttt tctgctgccc cagaacgaat gcaagttctg gcagcttctc  
 240  
 ctctccttg gaggaggaaa ggagggtctg cctccaggtc tcaggctgag ggagtgggct  
 300

ggagaccctc tagatggcca gcagaggctg gcctctgtga gaaggcttcc ttgcgtgact  
 360  
 ctggggccccc tcccaggctc tcctcgtggc aggcagggac ttgggccagc atgg  
 414

<210> 2614  
 <211> 107  
 <212> PRT  
 <213> Homo sapiens

<400> 2614  
 Met Val Leu Cys Leu Met Phe Ser Arg Tyr Ala Pro Thr Gly Lys Gly  
 1 5 10 15  
 Gln Val Gly Arg Gln Ser Leu Gly Trp Ser Glu Val Gly Leu Gly Ser  
 20 25 30  
 Thr Pro Ala Phe Leu Leu Pro Gln Asn Glu Cys Lys Phe Trp Gln Leu  
 35 40 45  
 Leu Leu Leu Leu Gly Gly Gly Lys Glu Gly Ser Pro Pro Gly Leu Arg  
 50 55 60  
 Leu Arg Glu Trp Ala Gly Asp Pro Leu Asp Gly Gln Gln Arg Leu Ala  
 65 70 75 80  
 Ser Val Arg Arg Leu Pro Cys Val Thr Leu Gly Pro Leu Pro Gly Ser  
 85 90 95  
 Pro Arg Gly Arg Gln Gly Leu Gly Pro Ala Trp  
 100 105

<210> 2615  
 <211> 394  
 <212> DNA  
 <213> Homo sapiens

<400> 2615  
 nnngccgccc ccctcggccg cagcgcgctt cttttgcgcn ncgacgtcag ccagaaggcg  
 60  
 gacgtcgacg ccatgctgaa ggaaacgctg gccagttcg gccacatcga taccctcgtc  
 120  
 aacaatgcgg gcgtcacgca tgcggccgat ttcctcgacg tgtgcgaaga cgatttcgac  
 180  
 cgggtcatgc gcattaacct gaaatcgatg ttcctgtgcg gccaggccgc ggcgcgcgag  
 240  
 atgggtcaagc gcaacagcgg ctgcatcatc aacatgtcca gcgtgaatgc ggaactggcc  
 300  
 attccgaacc aggtgccgta cgtggtgtcg aaaggcgcca tcaaccagct gaccaaggtc  
 360  
 atggccttga acctggcgcc gcacggtgcg cgct  
 394

<210> 2616  
 <211> 131  
 <212> PRT  
 <213> Homo sapiens

<400> 2616  
 Xaa Ala Ala Ala Leu Gly Arg Ser Ala Leu Leu Leu Arg Xaa Asp Val

```

      1           5           10           15
Ser Gln Lys Ala Asp Val Asp Ala Met Leu Lys Glu Thr Leu Ala Gln
      20           25           30
Phe Gly His Ile Asp Ile Leu Val Asn Asn Ala Gly Val Thr His Ala
      35           40           45
Ala Asp Phe Leu Asp Val Cys Glu Asp Asp Phe Asp Arg Val Met Arg
      50           55           60
Ile Asn Leu Lys Ser Met Phe Leu Cys Gly Gln Ala Ala Ala Arg Glu
      65           70           75           80
Met Val Lys Arg Asn Ser Gly Cys Ile Ile Asn Met Ser Ser Val Asn
      85           90           95
Ala Glu Leu Ala Ile Pro Asn Gln Val Pro Tyr Val Val Ser Lys Gly
      100          105          110
Ala Ile Asn Gln Leu Thr Lys Val Met Ala Leu Asn Leu Ala Pro His
      115          120          125
Gly Ala Arg
      130

```

<210> 2617  
 <211> 513  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2617
naccggttgg catcatgctc acagcactgg ggggtccctt ctttcttttc ctccctcagaa
60
agacattgtg agatgggaaa tatcatggaa acacctatac ttcccggtc ccacttgaac
120
gtcaccttgg gaaatcacia gattctcaat gacgtctccg tatcattcca agcgggagtt
180
atgcacgccca tacttggccc caacggttct gggaagacca ccttggtacg cacgttatgc
240
ggagccctct ccccgagtc ggggagcgtc aaattcgatg gaacggatct atccacgatg
300
tccgcatact gtatcgcgcg tcgtattgcg atcgtctggc agagcgcgac cgctccctct
360
gacctcaccc tacgtcacct cgttggttac gggagatatg cccacacacc gtggtggcag
420
ataagggaca ccagcgccga cagccatgtg gaacaagcaa tggagctggc cgatgtcacg
480
tgcttcgccc atcgacgcgt caccactctc tca
513

```

<210> 2618  
 <211> 171  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2618
Xaa Arg Leu Ala Ser Cys Ser Gln His Trp Gly Phe Pro Ser Phe Phe
1           5           10           15
Ser Ser Ser Glu Arg His Cys Glu Met Gly Asn Ile Met Glu Thr Pro
20           25           30
Ile Leu Ser Gly Ser His Leu Asn Val Thr Leu Gly Asn His Lys Ile

```

```

      35      40      45
Leu Asn Asp Val Ser Val Ser Phe Gln Ala Gly Val Met His Ala Ile
  50      55      60
Leu Gly Pro Asn Gly Ser Gly Lys Thr Thr Leu Val Arg Thr Leu Cys
  65      70      75      80
Gly Ala Leu Ser Pro Glu Ser Gly Ser Val Lys Phe Asp Gly Thr Asp
      85      90      95
Leu Ser Thr Met Ser Ala Ser Cys Ile Ala Arg Arg Ile Ala Ile Val
      100      105      110
Trp Gln Ser Ala Thr Ala Pro Ser Asp Leu Thr Val Arg His Leu Val
      115      120      125
Gly Tyr Gly Arg Tyr Ala His Thr Pro Trp Trp Gln Ile Arg Asp Thr
      130      135      140
Ser Ala Asp Ser His Val Glu Gln Ala Met Glu Leu Ala Asp Val Thr
      145      150      155      160
Cys Phe Ala Asp Arg Arg Val Thr Thr Leu Ser
      165      170

```

&lt;210&gt; 2619

&lt;211&gt; 348

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2619

```

nnaaatttcg acgaccttga ggttttcctc aagctgttgc cgcgttcggc anccggggaa
60
cggatgaacc cgtacaactc ggtgtggagc ggtgtgaccg acggtgacgg gccgcaggaa
120
cagcacgtca ttttccttga taacggtcgt accgacgtgc ttgccgacac ccttggtcgc
180
gaagtgttgc ggtgcatccg gtgtgcttcg tgtatcaata tctgcccggg ttacgagcgg
240
gcggggcggc acccttacgg ctcggtgtac cccggggccga ttggtgagggt gctcaatccg
300
cagctgcggg gcgtggagca tcccgtcgat cgtggtctgc catacgcg
348

```

&lt;210&gt; 2620

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2620

```

Xaa Asn Phe Asp Asp Leu Glu Val Phe Leu Lys Leu Leu Pro Arg Ser
  1      5      10      15
Ala Xaa Gly Glu Arg Met Asn Pro Tyr Asn Ser Val Trp Ser Gly Val
      20      25      30
Thr Asp Gly Asp Gly Pro Gln Glu Gln His Val Ile Phe Leu Asp Asn
      35      40      45
Gly Arg Thr Asp Val Leu Ala Asp Thr Leu Gly Arg Glu Val Leu Arg
      50      55      60
Cys Ile Arg Cys Ala Ser Cys Ile Asn Ile Cys Pro Val Tyr Glu Arg
      65      70      75      80
Ala Gly Gly His Pro Tyr Gly Ser Val Tyr Pro Gly Pro Ile Gly Ala

```

	85		90		95
Val	Leu	Asn	Pro	Gln	Leu
			Arg	Gly	Val
			Glu	His	Pro
			Val	Asp	Arg
			Gly		
	100		105		110
Leu	Pro	Tyr	Ala		
	115				

&lt;210&gt; 2621

&lt;211&gt; 1485

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2621

acgctgag gtaaaccaga ggccgtgtga ccagctcagt gctgggttac ggaacaactc  
 60  
 ttacttttaa aaattacttg ttccccaaa ttgttgagtg ccgccgttg gtttctatg  
 120  
 ttttctttcc ctgttttgat ttgtctgaag ggagaggtgg tgggtggttag gatcagagct  
 180  
 ctctgagcat ccgtggggag gatttgctgg tgggtggcttc gggctcatgc ccagacacac  
 240  
 tcactgcccc gtctgtccaa ggcctcccc tcccccttgc tgggtggagg agctcgtgtg  
 300  
 ctcttggtgc gttacttga agggcggttt tcagagctgc agggacaggg tgagcagctg  
 360  
 aagggttagg agggaagccg gccccgctc tgcagaagct gcatttcagc tgaatctgtg  
 420  
 tttcagctc agttggttc accgttagcc cctctctcc cggatggtca tgtttttgtc  
 480  
 acattagaga ataaacagcc acacacacat ttttttttcc tttaaaacag taacttgaa  
 540  
 atatgaaaag gccagaagga ggagcaagg ctgttttctg gagtgggtga ggtgtgttcc  
 600  
 tgcagttgtc attgtcttct ccaccgggct gttcccatct atttctctgt gaactgaatc  
 660  
 cctcctcccc cactccttg ggagcccagg tggctcttgg ccaccattca ggctttccaa  
 720  
 gaagccaacc accttgaga ttttttttct tgaatttcgc tgttttcttc tgcctccttt  
 780  
 agataaaaag cagctcaaga gaccttatct tagggatgag aaaaacatgc atattaattc  
 840  
 catctgagtg attgtcagtg taaggccttt taaaacaaaa gcaagttctt tgttaggaat  
 900  
 tgggtcaaat tcattctttt cttaagccc atcaactccc aggacggttt gagttactca  
 960  
 gttacctaa cttgctattc atccaaatca ttttctagag tcaactgtata aggttctatg  
 1020  
 agtagctgtg tatgaataaa tattacctgt ctacctcaaa atacacatac tgctgaagca  
 1080  
 ttctgtacaa ccgtgtgtta tcacagtga gttttaagt taacngttga acttaggcac  
 1140  
 tttctgtgt ggccgaataa gaaaggatnt aacagttaca agcctccaaa ttcagataaa  
 1200  
 attaaatcac agttcagatg aaactgaata tcattgtaat aatctcataa tatatatttg  
 1260

taacttgnta gctatctttg aaatcactgn actttgcaat ggtgctaagc tgatagattt  
 1320  
 aaatacacag acggggcgagt ggcgcccgtg tcgatgtctt cagccagtgg tgaccctgct  
 1380  
 tttgtaaccg cgtaaacctg acaaaacctc agcagcagaa gtccctattt ttctaggagt  
 1440  
 ttatcgtgca gacagtcttc actacaggac tcggccctgg ggccc  
 1485

<210> 2622  
 <211> 83  
 <212> PRT  
 <213> Homo sapiens

<400> 2622  
 Met Phe Ser Phe Pro Val Leu Ile Leu Leu Lys Gly Glu Val Val Val  
 1 5 10 15  
 Val Arg Ile Arg Ala Leu Leu Ala Ser Val Gly Arg Ile Cys Trp Trp  
 20 25 30  
 Trp Leu Arg Ala His Ala Gln Thr His Ser Leu Pro Arg Leu Ser Lys  
 35 40 45  
 Ala Ser Pro Ser Pro Leu Leu Val Gly Gly Ala Arg Val Leu Leu Gly  
 50 55 60  
 Arg Leu Leu Glu Gly Arg Phe Ser Glu Leu Gln Gly Gln Gly Glu Gln  
 65 70 75 80  
 Leu Lys Gly

<210> 2623  
 <211> 3524  
 <212> DNA  
 <213> Homo sapiens

<400> 2623  
 nggatccgaa ttcgcgcccg cgtcgactgg agaggacggc gttatcttta ttaactggag  
 60  
 gcgacggcgg ctgcggcgcc ggcgggaccc ccaggcctcc tccgggggtat gaaaatcggc  
 120  
 agtgggttcc tgagtggcgg cggaggtacc ggcagtagcg gtggtagcgg ctccggcgcc  
 180  
 ggtggtagtg gcggcgccgg cggcgccggc agcagcggca ggagggcaga gatggaaccc  
 240  
 acctttcccc agggatatgt tatgttcaac caccgtcttc ccccggtcac cagcttcacc  
 300  
 cggccggcgg ggtcggcgcc ccctcccccg caatgcgtgt taccctcttc tacctccgca  
 360  
 gccccggcgg ctgagcccc ccctccgcca gccccgaca tgactttcaa gaaggagccg  
 420  
 gcggcgctcag ccgcggcctt ccctccgagc aggaacctct ggggggttctt gcagtctttg  
 480  
 gttagcatca aacaggagaa acccgcgat cctgaggagc agcagtcacca ccaccacat  
 540  
 caccaccacc actatggggg gctgttcgct ggagctgaag agaggctctc aggcctagga  
 600

ggcgggtgaag ggggggagtc cggcggtcatc caggacctca gtattctcca ccagcatgtc  
660  
cagcagcaac cagcccagca ccaccgtgac gtattactca gcagcagtag caggactgat  
720  
gaccaccatg gcactgagga gccaaagcag gacactaatg tcaaaaaggc aaaaaggcca  
780  
aagccagaat ctccgggaat caaagccaag aggaagccaa gtgcatcttc caaaccttct  
840  
ttgggttgag atggagaagg tgccatcctc tccccaagtc agaaacctca tatctgtgat  
900  
cactgtagtg ctgctttccg aagctcctat cacctgcgga gacatgtcct cattcataca  
960  
ggagaaagac ctttccagtg cagccagtgt agtatgggtt tcattcagaa atacctacta  
1020  
cagagacatg agaaaattca tagtagagag aagccatttg gatgtgatca gtgcagcatg  
1080  
aagtttattc agaagtacca tatggagaga cacaagagga cacatagtgg agaaaagcca  
1140  
tataagtgtg acacttgcca acagtatttt tcaaggactg atagattggt gaagcacagg  
1200  
cgcacatgtg gtgaagtcac agttaaagga gccactagtg cagaacctgg gtcacaaac  
1260  
cataccaata tgggtaactc ggctgtgttg tctcagggaa atacaagttc ttcaaggaga  
1320  
aaaacaaagt caaaaagcat agctattgaa aataaggaac agaagaccgg taaaacaaat  
1380  
gaatcgcaaa tttcaataa tataaacatg cagagttact cagtagaaat gcctaccgtg  
1440  
tcttccagtg gaggcataat tggcactgga atagatgaac tgcagaagag ggtgccaaaa  
1500  
ttgatcttta agaaaggaag cagaaagaat acagataaaa actaccttaa ctttgtgtca  
1560  
ccattaccag acatagtagg acagaaatcc ttgtctggaa aaccaagtgg ctcacttggc  
1620  
atagtatcaa ataatagtgt ggagaccatt ggtcttctcc aaagtacaag tggcaaacaa  
1680  
ggtcagataa gtagtaatta tgatgatgcc atgcagtttt caaagaaaag aagatattta  
1740  
ccaactgcca gcagcaacag tgccctttct ataaacgtag gacacatggt ctcccaacag  
1800  
tctgtcattc agtctgcagg tgtcagtgtt ttggacaatg aggcaccatt gtcacttatt  
1860  
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<211> 895

<212> PRT

<213> Homo sapiens

<400> 2624

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Ser Gln Arg Thr Ser Trp Gly Phe Leu Gln Ser Leu Val Ser Ile Lys
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Gln Glu Lys Pro Ala Asp Pro Glu Glu Gln Gln Ser His His His His
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His His His His Tyr Gly Gly Leu Phe Ala Gly Ala Glu Glu Arg Ser
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Pro Gly Leu Gly Gly Glu Gly Gly Ser His Gly Val Ile Gln Asp
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Leu Ser Ile Leu His Gln His Val Gln Gln Gln Pro Ala Gln His His
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His Ser Glu Leu Val Gln Glu Glu Asn Leu Ser Pro Gly Thr Gln Thr
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Pro Ser Asn Asp Lys Ala Ser Met Leu Gln Glu Tyr Ser Lys Tyr Leu
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Phe Gly Met Leu Phe Gly Ser Gln Pro Gly Leu Tyr Leu Ser Ala Leu
      740      745      750
Asp Ala Thr His Gln Gln Leu Thr Pro Ser Gln Glu Leu Asp Asp Leu
      755      760      765
Ile Asp Ser Gln Lys Asn Leu Glu Thr Ser Ser Ala Phe Gln Ser Ser
      770      775      780
Ser Gln Lys Leu Thr Ser Gln Lys Glu Gln Lys Asn Leu Glu Ser Ser
785      790      795      800
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Gln Lys Asp Ile Glu Pro Arg Thr Thr Tyr Gln Ile Glu Asn Phe Ala
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Gln Ala Phe Gly Ser Gln Phe Lys Ser Gly Ser Arg Val Pro Met Thr
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Phe Ile Thr Asn Ser Asn Gly Glu Val Asp His Arg Val Arg Thr Ser
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<400> 2628  
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Asp Cys Thr Cys Ile Ser Thr Ala Glu Leu Phe Ile Cys Asp Ser Ala
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Phe Phe Arg Ser Ser Gly Ser Arg Glu Arg His Ser Phe Lys Val Phe
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&lt;211&gt; 650

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2629

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&lt;211&gt; 58

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2630

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<211> 550

<212> PRT

<213> Homo sapiens

<400> 2632

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 His Lys Asp Asp Val Cys Tyr Phe Ala Tyr His Tyr Pro Tyr Thr Tyr  
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&lt;211&gt; 1569

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2633

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&lt;211&gt; 59

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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&lt;211&gt; 63

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2636

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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2637

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<212> PRT

<213> Homo sapiens

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Glu	Thr	Glu	Glu	Lys	Ser	Ile	Leu	Leu	Glu	Ser	Asp	Asn	Glu	Asp	Glu
		180					185						190		
Lys	Leu	Ser	Arg	Gly	Gln	His	Cys	Ile	Glu	Ile	Ser	Ser	Leu	Pro	Gly
	195				200						205				
Asp	Leu	Val	Ile	Val	Glu	Lys	Asp	His	Ser	Ala	Thr	Thr	Glu	Pro	Leu
	210				215						220				
Asp	Val	Thr	Lys	Thr	Gln	Thr	Phe	Ser	Val	Val	Pro	Asn	Gln	Asp	Lys
225				230						235				240	
Asn	Asn	Glu	Ile	Met	Lys	Leu	Leu	Thr	Val	Gly	Thr	Ser	Glu	Ile	Ser
			245					250					255		
Ser	Arg	Asp	Ile	Asp	Pro	His	Val	Glu	Gly	Gln	Ile	Gly	Gln	Val	Ala

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Glu Met Gln Lys Asn Lys Ile Ser Lys Asp Asp Asp Ile Met Ser Glu
      275      280      285
Asp Leu Pro Gly His Gln Gly Asp Leu Ser Thr Phe Leu His Gln Glu
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Gly Lys Arg Glu Lys Ile Thr Pro Arg Asn Gly Glu Leu Phe His Cys
      305      310      315      320
Val Ser Glu Asn Glu His Gly Ala Pro Thr Arg Lys Asp Met Val Arg
      325      330      335
Ser Ser Phe Val Thr Arg His Ser Arg Ile Pro Val Leu Ala Gln Glu
      340      345      350
Ile Asp Ser Thr Leu Glu Ser Ser Ser Pro Val Ser Ala Lys Glu Lys
      355      360      365
Leu Leu Gln Lys Lys Ala Tyr Gln Pro Asp Leu Val Lys Leu Leu Val
      370      375      380
Glu Lys Arg Gln Phe Lys Ser Phe Leu Gly Asp Leu Ser Ser Ala Ser
      385      390      395      400
Asp Lys Leu Leu Glu Glu Lys Leu Ala Thr Val Pro Ala Pro Phe Cys
      405      410      415
Glu Glu Glu Val Leu Thr Pro Phe Ser Arg Leu Thr Val Asp Ser His
      420      425      430
Leu Ser Arg Ser Ala Glu Asp Ser Phe Leu Ser Pro Ile Ile Ser Gln
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Ser Arg Lys Ser Lys Ile Pro Arg Pro Val Ser Trp Val Asn Thr Asp
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Gln Val Asn Ser Ser Thr Ser Ser Gln Phe Phe Pro Arg Pro Pro Pro
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Gly Lys Pro Pro Thr Arg Pro Gly Val Glu Ala Arg Leu Arg Arg Tyr
      485      490      495
Lys Val Leu Gly Ser Ser Asn Ser Asp Ser Asp Leu Phe Ser Arg Leu
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Ala Gln Ile Leu Gln Asn Gly Ser Gln Lys Pro Arg Ser Thr Thr Gln
      515      520      525
Cys Lys Ser Pro Gly Ser Pro His Asn Pro Lys Thr Pro Pro Lys Ser
      530      535      540
Pro Val Val Pro Arg Arg Ser Pro Ser Ala Ser Pro Arg Ser Ser Ser
      545      550      555      560
Leu Pro Arg Thr Ser Ser Ser Ser Pro Ser Arg Ala Gly Arg Pro His
      565      570      575
His Asp Gln Arg Ser Ser Ser Pro His Leu Gly Arg Ser Lys Ser Pro
      580      585      590
Pro Ser His Ser Gly Ser Ser Ser Ser Arg Arg Ser Cys Gln Gln Glu
      595      600      605
His Cys Lys Pro Ser Lys Asn Gly Leu Lys Gly Ser Gly Ser Leu His
      610      615      620
His His Ser Ala Ser Thr Lys Thr Pro Gln Gly Lys Ser Lys Pro Ala
      625      630      635      640
Ser Lys Leu Ser Arg
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&lt;210&gt; 2641

&lt;211&gt; 744

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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<212> PRT  
<213> Homo sapiens

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20 25 30  
Val Thr Val Arg Ile His Gly Ser Met Leu Arg Ala His Arg Cys Val  
35 40 45  
Leu Ala Ala Gly Ser Pro Phe Phe Gln Asp Lys Leu Leu Leu Gly Tyr  
50 55 60  
Ser Asp Ile Glu Ile Pro Ser Val Val Ser Val Gln Ser Val Gln Lys  
65 70 75 80  
Leu Ile Asp Phe Met Tyr Ser Gly Val Leu Arg Val Ser Gln Ser Glu  
85 90 95  
Ala Leu Gln Ile Leu Thr Ala Ala Ser Ile Leu Gln Ile Lys Thr Val  
100 105 110  
Ile Asp Glu Cys Thr Arg Ile Val Ser Gln Asn Val Gly Asp Val Phe  
115 120 125  
Pro Gly Ile Gln Asp Ser Gly Gln Asp Thr Pro Arg Gly Thr Pro Glu  
130 135 140  
Ser Gly Thr Ser Gly Gln Ser Ser Asp Thr Glu Ser Gly Tyr Leu Gln

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Ser	His	Pro	Gln	His	Ser	Val	Asp	Arg	Ile	Tyr	Ser	Ala	Leu	Tyr	Ala
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<212> PRT  
<213> Homo sapiens

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Asp Thr Ala Leu Asp Asn Cys Gln Asp Leu Phe Leu Leu Asp Pro Pro  
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Arg Pro Asn Leu Thr Ser His Pro Asp Gly Ser Glu Asp Leu Glu Pro  
50 55 60  
Leu Ala Gly Gly Ser Pro Glu Ala Thr Ser Pro Asp Val Thr Glu Thr  
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Lys Asn Ser Pro Leu Met Glu Asp Phe Phe Glu Glu Gly Phe Ser Gln  
85 90 95  
Glu Ile Ile Glu Met Leu Ser Lys Asp Gly Phe Trp Asn Ser Asn Phe  
100 105 110  
Gly Glu Ala Cys Ile Glu Asp Thr Trp Leu Asp Ser Leu Leu Gly Asp  
115 120 125  
Pro Glu Ser Leu Leu Arg Ser Asp Ile Ala Thr Asn Gly Glu Ser Pro  
130 135 140  
Thr Glu Cys Lys Ser His Glu Leu Lys Arg Gly Leu Ser Pro Val Ser  
145 150 155 160  
Thr Val Ser Thr Gly Glu Asp Ser Met Val His Asn Val Ser Glu Lys  
165 170 175  
Thr Leu Thr Pro Ala Lys Ser Lys Glu Tyr Arg Gly Glu Phe Phe Ser  
180 185 190  
Tyr Ser Asp His Ser Gln Gln Asp Ser Val Gln Glu Gly Glu Lys Pro  
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Tyr Gln Cys Ser Glu Cys Gly Lys Ser Phe Ser Gly Ser Tyr Arg Leu  
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Thr Gln His Trp Ile Thr His Thr Arg Glu Lys Pro Thr Val His Gln  
225 230 235 240  
Glu Cys Glu Gln Gly Phe Asp Arg Asn Ala Ser Leu Ser Val Tyr Pro  
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Lys Thr His Thr Gly Tyr Lys Phe Tyr Val Cys Asn Glu Tyr Gly Thr  
260 265 270  
Thr Phe Ser Gln Ser Thr Tyr Leu Trp His Gln Lys Thr His Thr Gly  
275 280 285  
Glu Lys Pro Cys Lys Ser Gln Asp Ser Asp His Pro Pro Ser His Asp  
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Thr Gln Pro Gly Glu His Gln Lys Thr His Thr Asp Ser Lys Ser Tyr  
305 310 315 320  
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Arg His Gln Lys Ile His Thr Arg Lys Arg Tyr Glu Cys Ser Lys Cys  
340 345 350  
Gln Ala Thr Phe Asn Leu Arg Lys His Leu Ile Gln His Gln Lys Thr

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Glu Pro Tyr Lys Cys Asn Glu Arg Gly Lys Ser Phe Arg His Asn Ser
      405      410      415
Thr Leu Lys Ile His Gln Arg Val His Ser Gly Glu Lys Pro Tyr Lys
      420      425      430
Cys Ser Glu Cys Gly Lys Ala Phe His Arg His Thr His Leu Asn Glu
      435      440      445
His Arg Arg Ile His Thr Gly Tyr Arg Pro His Lys Cys Gln Glu Cys
      450      455      460
Val Arg Ser Phe Ser Arg Pro Ser His Leu Met Arg His Gln Ala Ile
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His Thr Ala Glu Lys Pro Tyr Ser Cys Ala Glu Cys Lys Glu Thr Phe
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Ser Asp Asn Asn Arg Leu Val Gln His Gln Lys Met His Thr Val Lys
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Thr Pro Tyr Glu Cys Gln Glu Cys Gly Glu Arg Phe Ile Cys Gly Ser
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Thr Leu Lys Cys His Glu Ser Val His Ala Arg Glu Lys Gln Gly Phe
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Phe Val Ser Gly Lys Ile Leu Asp Gln Asn Pro Glu Gln Lys Glu Lys
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Cys Phe Lys Cys Asn Lys Cys Glu Lys Thr Phe Ser Cys Ser Lys Tyr
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Leu Thr Gln Tyr Glu Arg Ile His Thr Arg Gly Val Lys Pro Phe Glu
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Cys Asp Gln Cys Gly Lys Ala Phe Gly Gln Ser Thr Arg Leu Ile His
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His Gln Arg Ile His Ser Arg Val Arg Leu Tyr Lys Trp Gly Glu Gln
      610      615      620
Gly Lys Ala Ile Ser Ser Ala Ser Leu Ile Lys Leu Gln Ser Phe His
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Thr Lys Glu His Pro Phe Lys Cys Asn Glu Cys Gly Lys Thr Phe Ser
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His Ser Ala His Leu Ser Lys His Gln Leu Ile His Ala Gly Glu Asn
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Pro Phe Lys Cys Ser Lys Cys Asp Arg Val Phe Thr Gln Arg Asn Tyr
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Leu Val Gln His Glu Arg Thr His Ala Arg Lys Lys Pro Leu Val Cys
      690      695      700
Asn Glu Cys Gly Lys Thr Phe Arg Gln Ser Ser Cys Leu Ser Lys His
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Gln Arg Ile His Ser Gly Glu Lys Pro Tyr Val Cys Asp Tyr Cys Gly
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Lys Ala Phe Gly Leu Ser Ala Glu Leu Val Arg His Gln Arg Ile His
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Thr Gly Glu Lys Pro Tyr Val Cys Gln Glu Cys Gly Lys Ala Phe Thr
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Gln Ser Ser Cys Leu Ser Ile His Arg Arg Val His Thr Gly Glu Lys
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Leu	Arg	Val	His	Thr	Gln	Glu	Thr	Leu	Tyr	Gln	Cys	Gln	Arg	Cys	Gln
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Lys	Ala	Phe	Arg	Cys	His	Ser	Ser	Leu	Ser	Arg	His	Gln	Arg	Val	His
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865															

&lt;210&gt; 2645

&lt;211&gt; 1018

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2645

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1018

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&lt;210&gt; 2646

<211> 199  
 <212> PRT  
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<400> 2646

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Ala Arg Trp Glu His Lys Thr Arg Lys Leu Ser Arg Ala Phe Gly Ser
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Phe Leu Arg Ser His Cys Phe Thr Gln Ala Met Leu Ser Gln Pro Arg
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Leu Gly Leu Gly Val Val Leu Val Leu Ser Ser Phe Phe Ala Leu Gly
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Gly Ser Thr Ala Asn Tyr Leu Gly Trp Ala Ile Met His Ala Ser Pro
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Thr Gly Leu Leu Leu Thr Val Leu Val Ala Leu Thr Tyr Ile Met Ala
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 <212> DNA  
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<400> 2647

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&lt;210&gt; 2648

&lt;211&gt; 389

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2648

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Val Gly Gly Asp Ala Asn Trp Gln Leu Val Val Glu Glu Gly Glu Met
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Lys Val Tyr Arg Arg Glu Val Glu Glu Asn Gly Ile Val Leu Asp Pro
      195              200              205
Leu Lys Ala Thr His Ala Val Lys Gly Val Thr Gly His Glu Val Cys
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Asn Tyr Phe Trp Asn Val Asp Val Arg Asn Asp Trp Glu Thr Thr Ile
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Asn Ile Leu Cys Lys Ile Thr Tyr Val Ala Asn Val Asn Pro Gly Gly
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&lt;210&gt; 2649

&lt;211&gt; 1299

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2649

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<210> 2650

<211> 428

<212> PRT

<213> Homo sapiens

<400> 2650

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		20						25					30		
Glu	Glu	Asp	Arg	Asp	Gly	Leu	Trp	Asp	Ala	Trp	Gly	Pro	Trp	Ser	Glu
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Cys	Ser	Arg	Thr	Cys	Gly	Gly	Gly	Ala	Ser	Tyr	Ser	Leu	Arg	Arg	Cys
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Leu	Ser	Ser	Lys	Ser	Cys	Glu	Gly	Arg	Asn	Ile	Arg	Tyr	Arg	Thr	Cys
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180	185	190		
Arg Gly Gln Tyr Lys Ser	Gln Leu Ser Ala Thr	Lys Ser Asp Asp Thr		
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275	280	285		
Ala Asp Ser Thr Val Gln	Phe Ile Phe Tyr Gln	Pro Ile Ile His Arg		
290	295	300		
Trp Arg Glu Thr Asp Phe	Phe Pro Cys Ser Ala	Thr Cys Gly Gly Gly		
305	310	315	320	
Tyr Gln Leu Thr Ser Ala	Glu Cys Tyr Asp Leu	Arg Ser Asn Arg Val		
325	330	335		
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340	345	350		
Pro Lys Leu Gln Glu Cys	Asn Leu Asp Pro	Cys Pro Ala Ser Asp Gly		
355	360	365		
Tyr Lys Gln Ile Met Pro	Tyr Asp Leu Tyr His	Pro Leu Pro Arg Trp		
370	375	380		
Glu Ala Thr Pro Trp Thr	Ala Cys Ser Ser Ser	Cys Gly Gly Gly Ile		
385	390	395	400	
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 <212> DNA  
 <213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 2652

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			20					25					30		
Leu	Asn	Leu	Ile	Phe	Ile	Val	Leu	Glu	Thr	Gly	Arg	Val	Thr	Lys	Thr
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Lys	Asp	Gly	His	Glu	Val	Arg	Thr	Cys	Lys	Val	Ala	Asp	Lys	Thr	Gly
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Ser	Ile	Asn	Ile	Ser	Val	Trp	Asp	Asp	Val	Gly	Asn	Leu	Ile	Gln	Pro
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Gly	Asp	Ile	Ile	Arg	Leu	Thr	Lys	Gly	Tyr	Ala	Ser	Val	Phe	Lys	Gly
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Cys	Leu	Thr	Leu	Tyr	Thr	Gly	Arg	Gly	Gly	Asp	Leu	Gln	Lys	Ile	Gly
			100					105						110	
Glu	Phe	Cys	Met	Asp	Tyr	Ser	Glu	Val	Pro	Asn	Phe	Ser	Glu	Pro	Asn
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Pro	Glu	Tyr	Ser	Thr	Gln	Gln	Ala	Pro	Asn	Lys	Ala	Val	Gln	Asn	Asp
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			165						170					175	
Phe	Arg	Val	Val	Ala	His	Ile	Pro	Leu	Ile	Leu	Pro	Pro	Thr	His	Pro
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<211> 2103

<212> DNA

<213> Homo sapiens

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 <212> PRT  
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 Ser Asp Ser Lys Cys Leu Leu Leu Leu Gly Ala Val Ala His Ala Cys  
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&lt;210&gt; 2656

&lt;211&gt; 493

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2656

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Pro Thr Leu Pro Tyr Arg Thr Trp Glu Ala Ala Leu Arg Gln Lys Val
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Val Asn Pro Leu Glu Glu Lys Pro Phe His Glu Leu Pro Phe Tyr Gln
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130           135           140
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Lys Glu Asn Leu Glu Lys Pro Arg Ser Pro Gly Glu Val Thr Gly Phe
290           295           300
Gly Glu Pro Leu Ser Pro Gly Glu Ile Arg Phe Ile Glu Asn Gln Glu
305           310           315           320
Lys Tyr Gly Glu Ala Ser Arg Ile Lys Ile Glu Pro Ser Pro Leu Lys
325           330           335
Glu Asn Thr Leu Lys Ser Cys Gln Ile His Val Asn Gly Ser His Ser
340           345           350
Asp His Pro Glu Ile Asn Cys His Lys Val Val Arg Asp Ile Leu Leu
355           360           365
Glu Gln Ser Leu Gln Ser His Lys Lys Leu Lys Leu Thr Lys Met Arg
370           375           380
Ala Lys Lys Lys Lys Lys Lys Lys Lys Leu Lys Asp Val Leu Asn
385           390           395           400
Glu Asn Leu Gln Arg Lys Arg Glu Gly Leu His Ser Leu Ala Phe Lys
405           410           415
Ser Tyr Lys Pro Glu Ile Gln Asn Lys Leu Leu Ile Ile Lys Lys Lys

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	420		425		430										
Ala	Lys	His	Lys	Lys	His	Lys	Ser	Gly	Lys	Lys	Ser	Val	Ser	Lys	Lys
	435				440						445				
Ala	Ile	Thr	Lys	Lys	Arg	Lys	Thr	Val	Ile	Lys	Ser	Pro	Thr	Val	Pro
	450				455						460				
Glu	Phe	Gln	Leu	Ile	Cys	Thr	Asn	Leu	Asp	Glu	Leu	Arg	Glu	Leu	Ile
465					470					475					480
Thr	Lys	Ile	Glu	Asn	Glu	Leu	Lys	Asp	Leu	Glu	Lys	Lys			
			485						490						

&lt;210&gt; 2657

&lt;211&gt; 972

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2657

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480cacagacatg aagggtattcc ccgtggaatg aggttagaaa aggaaggcca agagtggacg  
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780ccagcaccaa gcatgcatgg ttggtgatgt ggaacttacg cagagcgtgg cggtcgggca  
840ggcggctgtg caggggctgg gcatggatat acagggctcg gtagaactcc tggcagtcct  
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960

tgggggttccg ga

972

&lt;210&gt; 2658

&lt;211&gt; 76

&lt;212&gt; PRT

<213> Homo sapiens

<400> 2658

Glu Arg Asp Gly Gly Arg Gly Arg Lys Trp Glu Thr Glu Thr Asn Ile  
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 Cys Thr Ala Cys Ala Cys His Thr Leu Pro Ser Gly Pro Glu Gly Gly  
 20 25 30  
 Leu Trp Gly Gly Ala Gly Glu Arg Gly Cys Gln Ala Trp Ala Ala Ala  
 35 40 45  
 Asp Leu Gly Gly His Gly Gly Ser Met Pro Ser Thr Ala Gly Trp Gly  
 50 55 60  
 Ala Leu Pro Gly Pro Ala Pro Ser Met His Gly Trp  
 65 70 75

<210> 2659

<211> 691

<212> DNA

<213> Homo sapiens

<400> 2659

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 120  
 aatggagaga acaccttcaa acgcattgga ccccgctgg agaagcctgt ggagaagggtg  
 180  
 cagaggggtg aggccctccc gagggccggtt ccgcagaacc tgccacagcc acagatgcca  
 240  
 ccctatgctt tcgcgcaccc acccttcccc ctgcctcccc tgcggcctgt gttcaacaac  
 300  
 ttccactca acatggggcc tatcccagcc ccgtacgtgc cccctctgcc caacgtgagg  
 360  
 gtcaactatg acttcggtcc catccacatg cccctggagc acaacctgcc catgcacttt  
 420  
 ggccccccag cgcggcatcg cttctgatgg ccccgaaatcc ccattgagca gcacaaagcc  
 480  
 cgtttggggt agggagtgtg atggagaacc ctcccccaag gctggtgtct gtaccattgc  
 540  
 atcctaagtc agcttgaagg gtaggctggt tttcttccca ccccttccct agaagggcta  
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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a  
 691

<210> 2660

<211> 120

<212> PRT

<213> Homo sapiens

<400> 2660

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 Thr Phe Lys Arg Ile Gly Pro Pro Leu Glu Lys Pro Val Glu Lys Val

	20		25		30										
Gln	Arg	Val	Glu	Ala	Leu	Pro	Arg	Pro	Val	Pro	Gln	Asn	Leu	Pro	Gln
	35						40				45				
Pro	Gln	Met	Pro	Pro	Tyr	Ala	Phe	Ala	His	Pro	Pro	Phe	Pro	Leu	Pro
	50					55				60					
Pro	Val	Arg	Pro	Val	Phe	Asn	Asn	Phe	Pro	Leu	Asn	Met	Gly	Pro	Ile
	65				70				75					80	
Pro	Ala	Pro	Tyr	Val	Pro	Pro	Leu	Pro	Asn	Val	Arg	Val	Asn	Tyr	Asp
			85					90					95		
Phe	Gly	Pro	Ile	His	Met	Pro	Leu	Glu	His	Asn	Leu	Pro	Met	His	Phe
		100						105					110		
Gly	Pro	Gln	Pro	Arg	His	Arg	Phe								
		115					120								

&lt;210&gt; 2661

&lt;211&gt; 1395

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2661

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 60  
 tgtattggaa aagatgcacc gattgctctt aagaggaaac tggagatgaa agccttgagg  
 120  
 gaattagaca gattttctgt ttgaaatagc caacacatgt ttgaagtact agctgccatg  
 180  
 aatcacccgat ctcttatact cctggatgaa tgcagtaagg tggctcctaga taatatccat  
 240  
 ggggtgtcctt taagaataat gatcaacata ttgcagtcct gcaaagacct ccagtaccat  
 300  
 aatttggatc tcttcaaggg acttgcagat tatgtggctg caactttcga catctggaag  
 360  
 ttcagaaaag ttctttttat cctcatttta ttgaaaacc ttggctttcg acctgttggg  
 420  
 ttaatggacc tgtttatgaa gagaatagta gaggatcctg aatccctaaa catgaaaaac  
 480  
 attctatcta ttcttcatac ttactcttct ctcaatcatg tctacaaatg ccagaacaaa  
 540  
 gaacagttcg tggaagtat ggctagtgtc ctgactgggt atcttcacac tatttcttct  
 600  
 gaaaacttat tggatgcagt atattcattt tgcttgatga attactttcc cctggctcct  
 660  
 tttaatcagc ttctgcaaaa agacatcatc agtgagctgc tgacatcaga tgacatgaag  
 720  
 aatgcttaca agctgcatac ttgggatact tgtctaaaac ttgatgatac tgtctatctg  
 780  
 agggacatag ccttgtcact cccacagctg ccgcgggagc tgccatcgtc acatacaaat  
 840  
 gcaaagggtg cagaggtgct gacgagcctt ctgggaggtg aaggacactt ctcaaaggat  
 900  
 gtgcacttgc cacacaatta tcatattgat ttgaaatca gaatggacac taacaggaat  
 960  
 caagtgtac cactttctga tgtggatata acttctgcta cagatattca aagagtagct  
 1020

gtgctatgtg tttccagatc tgcttattgt ttgggttcaa gccacccag aggattcctt  
 1080  
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 1200  
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 1260  
 ccttttcata ttaggagaca tgcatttcta aaaattaata aagatgacaa gtcagttgtc  
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 1380  
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 1395

<210> 2662

<211> 415

<212> PRT

<213> Homo sapiens

<400> 2662

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Val	Val	Met	Lys	Cys	Ile	Gly	Lys	Asp	Ala	Pro	Ile	Ala	Leu	Lys	Arg
			20					25					30		
Lys	Leu	Glu	Met	Lys	Ala	Leu	Arg	Glu	Leu	Asp	Arg	Phe	Ser	Val	Leu
		35					40					45			
Asn	Ser	Gln	His	Met	Phe	Glu	Val	Leu	Ala	Ala	Met	Asn	His	Arg	Ser
	50					55					60				
Leu	Ile	Leu	Leu	Asp	Glu	Cys	Ser	Lys	Val	Val	Leu	Asp	Asn	Ile	His
	65			70					75				80		
Gly	Cys	Pro	Leu	Arg	Ile	Met	Ile	Asn	Ile	Leu	Gln	Ser	Cys	Lys	Asp
			85					90					95		
Leu	Gln	Tyr	His	Asn	Leu	Asp	Leu	Phe	Lys	Gly	Leu	Ala	Asp	Tyr	Val
		100						105					110		
Ala	Ala	Thr	Phe	Asp	Ile	Trp	Lys	Phe	Arg	Lys	Val	Leu	Phe	Ile	Leu
		115					120					125			
Ile	Leu	Phe	Glu	Asn	Leu	Gly	Phe	Arg	Pro	Val	Gly	Leu	Met	Asp	Leu
	130					135					140				
Phe	Met	Lys	Arg	Ile	Val	Glu	Asp	Pro	Glu	Ser	Leu	Asn	Met	Lys	Asn
	145			150					155				160		
Ile	Leu	Ser	Ile	Leu	His	Thr	Tyr	Ser	Ser	Leu	Asn	His	Val	Tyr	Lys
		165					170					175			
Cys	Gln	Asn	Lys	Glu	Gln	Phe	Val	Glu	Val	Met	Ala	Ser	Ala	Leu	Thr
		180					185					190			
Gly	Tyr	Leu	His	Thr	Ile	Ser	Ser	Glu	Asn	Leu	Leu	Asp	Ala	Val	Tyr
	195					200					205				
Ser	Phe	Cys	Leu	Met	Asn	Tyr	Phe	Pro	Leu	Ala	Pro	Phe	Asn	Gln	Leu
	210				215						220				
Leu	Gln	Lys	Asp	Ile	Ile	Ser	Glu	Leu	Leu	Thr	Ser	Asp	Asp	Met	Lys
	225			230					235					240	
Asn	Ala	Tyr	Lys	Leu	His	Thr	Leu	Asp	Thr	Cys	Leu	Lys	Leu	Asp	Asp
			245					250					255		
Thr	Val	Tyr	Leu	Arg	Asp	Ile	Ala	Leu	Ser	Leu	Pro	Gln	Leu	Pro	Arg

	260		265		270										
Glu	Leu	Pro	Ser	Ser	His	Thr	Asn	Ala	Lys	Val	Ala	Glu	Val	Leu	Ser
	275						280					285			
Ser	Leu	Leu	Gly	Gly	Glu	Gly	His	Phe	Ser	Lys	Asp	Val	His	Leu	Pro
	290						295				300				
His	Asn	Tyr	His	Ile	Asp	Phe	Glu	Ile	Arg	Met	Asp	Thr	Asn	Arg	Asn
	305					310				315				320	
Gln	Val	Leu	Pro	Leu	Ser	Asp	Val	Asp	Thr	Thr	Ser	Ala	Thr	Asp	Ile
			325						330				335		
Gln	Arg	Val	Ala	Val	Leu	Cys	Val	Ser	Arg	Ser	Ala	Tyr	Cys	Leu	Gly
		340						345				350			
Ser	Ser	His	Pro	Arg	Gly	Phe	Leu	Ala	Met	Lys	Met	Arg	His	Leu	Asn
	355					360					365				
Ala	Met	Gly	Phe	His	Val	Ile	Leu	Val	Asn	Asn	Trp	Glu	Met	Asp	Lys
	370					375					380				
Leu	Glu	Met	Glu	Asp	Ala	Val	Thr	Phe	Leu	Lys	Thr	Lys	Ile	Tyr	Ser
	385				390					395				400	
Val	Glu	Ala	Leu	Pro	Val	Ala	Ala	Val	Asn	Val	Gln	Ser	Thr	Gln	
			405					410					415		

&lt;210&gt; 2663

&lt;211&gt; 1024

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2663

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 120  
 ctcggaata ttgattttag acaggcagac ttctgcgtta tgaccggct gctgggctac  
 180  
 gtggaccccc tggateccag ctttgtggct gccgtcatca ccatcacett caatccgctc  
 240  
 tactggaatg tggttgcacg atgggaacac aagacccgca agctgagcag ggccttcgga  
 300  
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 360  
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 420  
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 480  
 ttctttgcac tggggttcgc tggaactttc ctagggtgatt acttcgggat cctcaaggag  
 540  
 gcgagagtga ccgtgttccc cttcaacatc ctggacaacc ccatgtactg ggggaagcaca  
 600  
 gccaaactacc tgggctgggc catcatgcac gccagcccca cgggcctgct cctgacgggtg  
 660  
 ctgggtggccc tcacctacat aatggctctc ctatacgaag agcccttcac cgctgagatc  
 720  
 taccggcaga aagcctccgg gtcccacaag aggagctgat tgagctgcaa cagctttgct  
 780  
 gaaggcctgg ccagcctccc tcgtgcccc aagtggcaggc cctgcgcagg gcgagaatgg  
 840



tgctgtgc tcagggcctc ccccgcgctg ggctgcccc gtccttgga acctgctgcc  
 900  
 ttggggaccc tggacgtgcc gacatatggc cattgagctc caaccacac attcccatc  
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 1020  
 aaaa  
 1024

<210> 2664  
 <211> 199  
 <212> PRT  
 <213> Homo sapiens

<400> 2664  
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 20 25 30  
 Ala Arg Trp Glu His Lys Thr Arg Lys Leu Ser Arg Ala Phe Gly Ser  
 35 40 45  
 Pro Tyr Leu Ala Cys Tyr Ser Leu Ser Val Thr Ile Leu Leu Asn  
 50 55 60  
 Phe Leu Arg Ser His Cys Phe Thr Gln Ala Met Leu Ser Gln Pro Arg  
 65 70 75 80  
 Met Glu Ser Leu Asp Thr Pro Ala Ala Tyr Ser Leu Gly Leu Ala Leu  
 85 90 95  
 Leu Gly Leu Gly Val Val Leu Val Leu Ser Ser Phe Phe Ala Leu Gly  
 100 105 110  
 Phe Ala Gly Thr Phe Leu Gly Asp Tyr Phe Gly Ile Leu Lys Glu Ala  
 115 120 125  
 Arg Val Thr Val Phe Pro Phe Asn Ile Leu Asp Asn Pro Met Tyr Trp  
 130 135 140  
 Gly Ser Thr Ala Asn Tyr Leu Gly Trp Ala Ile Met His Ala Ser Pro  
 145 150 155 160  
 Thr Gly Leu Leu Leu Thr Val Leu Val Ala Leu Thr Tyr Ile Met Ala  
 165 170 175  
 Leu Leu Tyr Glu Glu Pro Phe Thr Ala Glu Ile Tyr Arg Gln Lys Ala  
 180 185 190  
 Ser Gly Ser His Lys Arg Ser  
 195

<210> 2665  
 <211> 720  
 <212> DNA  
 <213> Homo sapiens

<400> 2665  
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 120  
 gcgccaatgc gaagcggtgc agtcgcttga ctcacctgag gctctccaag gataccttca  
 180

atgcctgcac tgtaaggag ctgcttttcc cgggtgctgg cgagaacgga agccttcctt  
 240  
 tgacgttttt ctaaactgg gatgcagtct gtgcagcctg cagaagcaag aggagcagta  
 300  
 caaattactt atgaagtttg tcagggtcaac ggagagagact tatccagagc aactcatgac  
 360  
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 420  
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 480  
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 540  
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 600  
 ccaaagtact acattggaga catccatcag gagatggaca gggaggagct ggagctggag  
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<210> 2666

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2666

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Tyr	Glu	Val	Cys	Gln	Val	Asn	Gly	Arg	Asp	Leu	Ser	Arg	Ala	Thr	His
			20				25					30			
Asp	Gln	Ala	Val	Glu	Ala	Phe	Lys	Thr	Ala	Lys	Glu	Pro	Ile	Val	Val
		35				40					45				
Gln	Val	Leu	Arg	Arg	Thr	Pro	Arg	Thr	Lys	Met	Phe	Thr	Pro	Pro	Ser
	50				55					60					
Glu	Ser	Gln	Leu	Val	Asp	Thr	Gly	Thr	Gln	Thr	Asp	Ile	Thr	Phe	Glu
	65			70				75					80		
His	Ile	Met	Ala	Leu	Thr	Lys	Met	Ser	Ser	Pro	Ser	Pro	Pro	Val	Leu
		85					90						95		
Asp	Pro	Tyr	Leu	Leu	Pro	Glu	Glu	His	Pro	Ser	Ala	His	Glu	Tyr	Tyr
	100						105						110		
Asp	Pro	Asn	Asp	Tyr	Ile	Gly	Asp	Ile	His	Gln	Glu	Met	Asp	Arg	Glu
	115					120					125				
Glu	Leu	Glu	Leu	Glu	Glu	Val	Asp	Leu	Tyr	Arg	Met	Asn	Ser	Gln	Asp
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Lys	Leu	Gly	Leu	Thr	Val	Cys	Tyr	Arg							
145					150										

<210> 2667

<211> 289

<212> DNA

<213> Homo sapiens

<400> 2667

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 120  
 tgggtgccag gcctatgttg gaggacaaga catttcaaag aaagtattaa attcattcac  
 180  
 gagtgcggcg tccgcgggga gagctgcctt gtacactgcc tggccgggggt ctccaggagc  
 240  
 gtgacactgg tgatgcata catcatgacc gtcactgact ttggctggg  
 289

<210> 2668  
 <211> 96  
 <212> PRT  
 <213> Homo sapiens

<400> 2668  
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 Asn Pro Phe Ser Val Cys Pro Arg Trp Val Pro Gly Leu Cys Trp Arg  
 35 40 45  
 Thr Arg His Phe Lys Glu Ser Ile Lys Phe Ile His Glu Cys Arg Leu  
 50 55 60  
 Arg Gly Glu Ser Cys Leu Val His Cys Leu Ala Gly Val Ser Arg Ser  
 65 70 75 80  
 Val Thr Leu Val Ile Ala Tyr Ile Met Thr Val Thr Asp Phe Gly Trp  
 85 90 95

<210> 2669  
 <211> 4285  
 <212> DNA  
 <213> Homo sapiens

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 180  
 cggccccgcc gagagccgga ggcaatggat gaacagagcg tggagagcat tgctgaggtt  
 240  
 ttccgatgtt tcatttgtat ggagaaattg cgggatgcac gcctgtgtcc tcattgctcc  
 300  
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 360  
 cattgccgtg ctccactcca gctacgagaa ctagtaaatt gtcgttgggc agaagaagta  
 420  
 acacaacagc ttgatactct tcaactctgc agtctcacca aacatgaaga aaatgaaaag  
 480  
 gacaaatgtg aaaatcacca tgaaaaactt agtgtatattt gctggacttg taagaagtgt  
 540  
 atctgccatc agtgtgcact ttggggagga atgcatggcg gacatacctt taaacctttg  
 600

gcagaaatTT atgagcaaca cgtcactaaa gtgaatgaag aggtagccaa acttcgtcgg  
660  
cgtctcatgg aactgatcag cttagttcaa gaagtggaaa ggaatgtaga agctgtaaga  
720  
aatgcaaaag atgagcgtgt tcgggaaatt aggaatgcag tggagatgat gattgcacgg  
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960  
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1260  
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1320  
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1380  
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cacaaaaccg atccatagaa gggcttccca aaccttgttt tgcaacatcc caaattgtct  
 4680  
 ccagttgaag gaaggccttt atcagattca tagatgagct ttcattgtaa aaataaatgt  
 4740  
 actttgcacc acttcatgat ggaggagaa gtggtcacag gctcgtcagt ctatcatctc  
 4800  
 acagctgaag caggatcccc agggctaccg ctgtggtctc tcattggaggg aagggtagga  
 4860  
 cttctctgcc aagtttagatg tcacctgatg gggtttatata ggggtggtgc accttcaggt  
 4920  
 gggtttccagg agtgaggcca tggcaacctg agcctctggc cttgctgcaa gggggccgagc  
 4980  
 cactgcagtc gccatggctg tggagggcag ttgctctggg gaggacagaa gactg  
 5035

<210> 2674

<211> 690

<212> PRT

<213> Homo sapiens

<400> 2674

Ala	Ala	Gly	Phe	Arg	Ala	Met	Ile	Pro	Pro	Gln	Glu	Ala	Ser	Ala	Arg
1				5					10					15	
Arg	Arg	Glu	Ile	Glu	Asp	Lys	Leu	Lys	Gln	Glu	Glu	Glu	Thr	Leu	Ser
			20					25					30		
Phe	Ile	Arg	Asp	Ser	Leu	Glu	Lys	Ser	Asp	Gln	Leu	Thr	Lys	Asn	Met
		35					40					45			
Val	Ser	Ile	Leu	Ser	Ser	Phe	Glu	Ser	Arg	Leu	Met	Lys	Leu	Glu	Asn
	50					55				60					
Ser	Ile	Ile	Pro	Val	His	Lys	Gln	Thr	Glu	Asn	Leu	Gln	Arg	Leu	Gln
	65				70					75				80	
Glu	Asn	Val	Glu	Lys	Thr	Leu	Ser	Cys	Leu	Asp	His	Val	Ile	Ser	Tyr
		85						90					95		
Tyr	His	Val	Ala	Ser	Asp	Thr	Glu	Lys	Ile	Ile	Arg	Glu	Gly	Pro	Thr
		100						105					110		
Gly	Arg	Leu	Glu	Glu	Tyr	Leu	Gly	Ser	Met	Ala	Lys	Ile	Gln	Lys	Ala
		115					120					125			
Val	Glu	Tyr	Phe	Gln	Asp	Asn	Ser	Pro	Asp	Ser	Pro	Glu	Leu	Asn	Lys
	130					135					140				
Val	Lys	Leu	Leu	Phe	Glu	Arg	Gly	Lys	Glu	Ala	Leu	Glu	Ser	Glu	Phe
	145				150					155				160	
Arg	Ser	Leu	Met	Thr	Arg	His	Ser	Lys	Val	Val	Ser	Pro	Val	Leu	Ile
		165						170						175	
Leu	Asp	Leu	Ile	Ser	Gly	Asp	Asp	Asp	Leu	Glu	Ala	Gln	Glu	Asp	Val
		180					185						190		
Thr	Leu	Glu	His	Leu	Pro	Glu	Ser	Val	Leu	Gln	Asp	Val	Ile	Arg	Ile
	195						200					205			
Ser	Arg	Trp	Leu	Val	Glu	Tyr	Gly	Arg	Asn	Gln	Asp	Phe	Met	Asn	Val
	210					215					220				
Tyr	Tyr	Gln	Ile	Arg	Ser	Ser	Gln	Leu	Asp	Arg	Ser	Ile	Lys	Gly	Leu
	225					230				235				240	
Lys	Glu	His	Phe	His	Lys	Ser	Ser	Ser	Ser	Ser	Gly	Val	Pro	Tyr	Ser
		245						250						255	
Pro	Ala	Ile	Pro	Asn	Lys	Arg	Lys	Asp	Thr	Pro	Thr	Lys	Lys	Pro	Val

	260		265		270
Lys Arg Pro Gly Thr Ile Arg Lys Lys Ala Gln Asn Leu Leu Lys Gln Tyr					
275			280		285
Ser Gln His Gly Leu Asp Gly Lys Lys Gly Gly Ser Asn Leu Ile Pro					
290			295		300
Leu Glu Gly Arg Asp Asp Met Leu Asp Val Glu Thr Asp Ala Tyr Ile					
305			310		315
His Cys Val Ser Ala Phe Val Lys Leu Ala Gln Ser Glu Tyr Gln Leu					
			325		330
Leu Ala Asp Ile Ile Pro Glu His His Gln Lys Lys Thr Phe Asp Ser					
			340		345
Leu Ile Gln Asp Ala Leu Asp Gly Leu Met Leu Glu Gly Glu Asn Ile					
			355		360
Val Ser Ala Ala Arg Lys Ala Ile Val Arg His Asp Phe Ser Thr Val					
			370		375
Leu Thr Val Phe Pro Ile Leu Arg His Leu Lys Gln Thr Lys Pro Glu					
			385		390
Phe Asp Gln Val Leu Gln Gly Thr Ala Ala Ser Thr Lys Asn Lys Leu					
			405		410
Pro Gly Leu Ile Thr Ser Met Glu Thr Ile Gly Ala Lys Ala Leu Glu					
			420		425
Asp Phe Ala Asp Asn Ile Lys Asn Asp Pro Asp Lys Glu Tyr Asn Met					
			435		440
Pro Lys Asp Gly Thr Val His Glu Leu Thr Ser Asn Ala Ile Leu Phe					
			450		455
Leu Gln Gln Leu Leu Asp Phe Gln Glu Thr Ala Gly Ala Met Leu Ala					
			465		470
Ser Gln Glu Thr Ser Ser Ser Ala Thr Ser Tyr Ser Ser Glu Phe Ser					
			485		490
Lys Arg Leu Leu Ser Thr Tyr Ile Cys Lys Val Leu Gly Asn Leu Gln					
			500		505
Leu Asn Leu Leu Ser Lys Ser Lys Val Tyr Glu Asp Pro Ala Leu Ser					
			515		520
Ala Ile Phe Leu His Asn Asn Tyr Asn Tyr Ile Leu Lys Ser Leu Glu					
			530		535
Lys Ser Glu Leu Ile Gln Leu Val Ala Val Thr Gln Lys Thr Ala Glu					
			545		550
Arg Ser Tyr Arg Glu His Ile Glu Gln Gln Ile Gln Thr Tyr Gln Arg					
			565		570
Ser Trp Leu Lys Val Thr Asp Tyr Ile Ala Glu Lys Asn Leu Pro Val					
			580		585
Phe Gln Pro Gly Val Lys Leu Arg Asp Lys Glu Arg Gln Ile Ile Lys					
			595		600
Glu Arg Phe Lys Gly Phe Asn Asp Gly Leu Glu Glu Leu Cys Lys Ile					
			610		615
Gln Lys Ala Trp Ala Ile Pro Asp Thr Glu Gln Arg Asp Arg Ile Arg					
			625		630
Gln Ala Gln Lys Thr Ile Val Lys Glu Thr Tyr Gly Ala Phe Leu Gln					
			645		650
Lys Phe Gly Ser Val Pro Phe Thr Lys Asn Pro Glu Lys Tyr Ile Lys					
			660		665
Tyr Gly Val Glu Gln Val Gly Asp Met Ile Asp Arg Leu Phe Asp Thr					
			675		680
Ser Ala					685

690

&lt;210&gt; 2675

&lt;211&gt; 711

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2675

```

agatctcagt gaagaggacc cttgttcact gtacctcacc aacttcctcc tggacgccac
60
tgtgggcatg ctgctcatct acgtgggggt gcgcgccgtc agcgtcctgg tagagtggca
120
gcagtgggag tccctgcgct tcggcgaata tggagaccct ctgcagtgtg gagcctgggt
180
cgggacgtgc gctctttaca tcgtgatcat gatttttgaa aagtctgtcg tcttcacgtg
240
cctcctccta ctccagtga aaaagggtggc cctattgaat ccaattgaaa accccgacct
300
gaagctggcc atcgatcgc tgatcgctcc cttctttgtc aacgctttga tgttttgggt
360
agtggacaat ttcctcatga gaaaggggaa gacgaaagct aagctagaag aaaggggagc
420
caaccaggac tcgaggaatg ggagcaaggt ccgctaccgg agggccgcat cccacgagga
480
gtctgagtct gagatcctga tctcagcggg tgatgagatg gaggagtccg acgtggagga
540
ggacctccgc agactgacct ccctcaagcc tgtgaagaaa aagaagcacc gctttggggt
600
acccgtatga cacattccca tgctgggggt gacgggaggg ccccgccagc cgctggtgtg
660
cagaggtcat cccacagcat cgttccttac cctctctctg cccttcaccc g
711

```

&lt;210&gt; 2676

&lt;211&gt; 180

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2676

```

Met Leu Leu Ile Tyr Val Gly Val Arg Ala Val Ser Val Leu Val Glu
1      5      10      15
Trp Gln Gln Trp Glu Ser Leu Arg Phe Gly Glu Tyr Gly Asp Pro Leu
20     25     30
Gln Cys Gly Ala Trp Val Gly Gln Cys Ala Leu Tyr Ile Val Ile Met
35     40     45
Ile Phe Glu Lys Ser Val Val Phe Ile Val Leu Leu Leu Gln Trp
50     55     60
Lys Lys Val Ala Leu Leu Asn Pro Ile Glu Asn Pro Asp Leu Lys Leu
65     70     75     80
Ala Ile Val Met Leu Ile Val Pro Phe Phe Val Asn Ala Leu Met Phe
85     90     95
Trp Val Val Asp Asn Phe Leu Met Arg Lys Gly Lys Thr Lys Ala Lys
100    105    110
Leu Glu Glu Arg Gly Ala Asn Gln Asp Ser Arg Asn Gly Ser Lys Val

```

```

      115      120      125
Arg Tyr Arg Arg Ala Ala Ser His Glu Glu Ser Glu Ser Glu Ile Leu
      130      135      140
Ile Ser Ala Asp Asp Glu Met Glu Glu Ser Asp Val Glu Glu Asp Leu
      145      150      155      160
Arg Arg Leu Thr Pro Leu Lys Pro Val Lys Lys Lys Lys His Arg Phe
      165      170      175
Gly Leu Pro Val
      180

```

<210> 2677  
 <211> 735  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2677
ngcgcgccag gaccgctcct gcaccgaggg tgcccgcgcg gctatggagg ccttccagag
60
ggccgctggt gagggcgccc cgggcccggg tggggcacgg cgcggtgcca ggggtgtgca
120
gagccccctt tgaggggcag gagctgggga gtggttagga catcagtcct tcaggtaggg
180
ggagtgaaca catcaggtcc atatgtgtcc caggagcatc cctagctggc cgccctgagt
240
gctgcatggg gcagagatgg gcaggtacac ggccctgcct gtgtgagcac ccctccctcc
300
gctggggcct tcagcctcct gagggagaaac ttctcccatg cgcagagccc agacatgagc
360
gctgcgtccc tctgcgcaat ggagcagctc atgatggccc agggccagga atgtgtgttt
420
gagggcctct caccacctgc ctccatggcc ccccaagact gcctggccca gctgcgcctg
480
gcgcaggagg ccgcccaggt gagctcgggc acccgtgtca ggatgcaggg ggtggggccg
540
agctgggggc agagcccagg tccaggcatg cgtgagctct cccacctcct tccttgtgtg
600
tcagccccga gccagctgtt gtcctgctcc ctgggggggc tggtcaggaa cctggggacc
660
cgagcctctg cctccaggga atggcacaaa gcagcaggaa ctgaggtgcc agggaggctg
720
ctgggatggt ggtag
735

```

<210> 2678  
 <211> 170  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2678
Leu Ala Ala Leu Ser Ala Ala Trp Gly Arg Asp Gly Gln Val His Gly
      1      5      10      15
Pro Ala Cys Val Ser Thr Pro Pro Ser Ala Gly Ala Phe Ser Leu Leu
      20      25      30
Arg Glu Asn Phe Ser His Ala Pro Ser Pro Asp Met Ser Ala Ala Ser

```



```

      35          40          45
Leu Cys Ala Leu Glu Gln Leu Met Met Ala Gln Ala Gln Glu Cys Val
 50          55          60
Phe Glu Gly Leu Ser Pro Pro Ala Ser Met Ala Pro Gln Asp Cys Leu
65          70          75          80
Ala Gln Leu Arg Leu Ala Gln Glu Ala Ala Gln Val Ser Ser Gly Thr
      85          90          95
Arg Val Arg Met Gln Gly Val Gly Pro Ser Trp Gly Gln Ser Pro Gly
      100          105          110
Pro Gly Met Arg Glu Leu Ser His Leu Leu Pro Cys Val Ser Ala Pro
      115          120          125
Ser Gln Leu Leu Ser Cys Ser Leu Gly Gly Leu Val Arg Asn Leu Gly
      130          135          140
Thr Arg Ala Ser Ala Ser Arg Glu Trp His Lys Ala Ala Gly Thr Glu
145          150          155          160
Val Pro Gly Arg Leu Leu Gly Trp Trp Ser
      165          170

```

<210> 2679  
 <211> 560  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2679
agccgcccc cctcctgttc cattataatc ttattttggt tatgttgata caacacaatc
60
tgtccttcca agtgcacc ggagtcaga tattctgtc aagtcagcca accaggaagg
120
ggctgcagac aaagtgcggc aacagggact ccaccaggcc atggagctca tcccacaaga
180
cgcctcaccg cacaggaggg ctgaccccag ggaaacgtgt caccaggaca cagcacgaag
240
ctcaaaaggg gctagcatgc tctgtgcagc tgccagactc tgccctgaag aatcacaggg
300
cactctagtg agcgtgcag cagccagcag gccctggatg gccaggtgtg cagtggggag
360
gcacaggggg tgcaccagga cgcagccaga cctggggcag ttgcgcccga ctcttctcca
420
ttccagaggt ccaggaagca cctgtcaatg tggaagtcag aatgctcagg ccaataaccg
480
agatcaacta actattcagg ttgaaccaga ggcctgggcg ggggcatcca actgccacc
540
cgtcagactg agggacgcgt
560

```

<210> 2680  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2680
Met Glu Leu Ile Pro Gln Asp Ala Ser Pro His Arg Arg Ala Asp Pro
 1          5          10          15
Arg Glu Thr Cys His Gln Asp Thr Ala Arg Ser Ser Lys Gly Ala Ser

```

```

      20      25      30
Met Leu Cys Ala Ala Ala Arg Leu Cys Pro Glu Glu Ser Gln Gly Thr
  35      40      45
Leu Val Ser Ala Ala Ala Ala Ser Arg Pro Trp Met Ala Arg Cys Ala
  50      55      60
Val Gly Arg His Arg Gly Cys Thr Arg Thr Gln Pro Asp Leu Gly Gln
  65      70      75      80
Phe Ala Pro Thr Leu Leu His Ser Arg Gly Pro Gly Ser Thr Cys Gln
      85      90      95
Cys Gly Ser Gln Asn Ala Gln Ala Lys Tyr Arg Asp Gln Leu Thr Ile
      100      105      110
Gln Val Glu Pro Glu Ala Trp Ala Gly Ala Ser Asn Cys Pro Pro Val
      115      120      125
Arg Leu Arg Asp Ala
      130

```

&lt;210&gt; 2681

&lt;211&gt; 585

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2681

```

gattctctag tagccctaatt tctacccatc tggctactaa ttcaaacttt cttccttcac
60
atctgtttgt ggactttctcc aatataacta gtatgcctgg gctcattctg cttcttctct
120
tctggaatag tttatttcat gaccatgtgc agaggggggtg atgggggcaag cctcacaagc
180
cccgagggtc tgtggctgag gtgtaccttg gctttgttgc ctggaactgc tctgactctg
240
ctcttcgctc tttcctgggc tgtgtcacta cagctctgac tcctttccac cttggagttt
300
agcttccctg ccaggaaagc taaggagtag gagttgttct tggaaacaaa tgccgagcga
360
tgtgtctgtg tcatctggcc tcgagaaggt tcttcattct ctgaatctga gagacgtgca
420
ggacaacggt ccagatttgt ttcagtact aatgggtcat ctcttttttt ctgttcaccc
480
attttccttt tccctgttcc tgtatcctct ggtaacagct tgtggatttg atcttcagag
540
ggtttttctc cttgtaactt ttcttctctc agctttctca agctt
585

```

&lt;210&gt; 2682

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2682

```

Met Asp Glu Gln Lys Lys Arg Asp Glu Pro Leu Val Leu Lys Thr Asn
  1      5      10      15
Leu Glu Arg Cys Pro Ala Arg Leu Ser Asp Ser Glu Asn Glu Glu Pro
      20      25      30
Ser Arg Gly Gln Met Thr Gln Thr His Arg Ser Ala Phe Val Ser Lys

```

```

      35          40          45
Asn Asn Ser Tyr Ser Leu Ala Phe Leu Ala Gly Lys Leu Asn Ser Lys
 50          55          60
Val Glu Arg Ser Gln Ser Cys Ser Asp Thr Ala Gln Glu Arg Ala Lys
65          70          75          80
Ser Arg Val Arg Ala Val Pro Gly Asn Lys Ala Lys Val His Leu Ser
      85          90          95
His Arg Pro Pro Gly Leu Val Arg Leu Ala Pro Ser Pro Pro Leu His
      100          105          110
Met Val Met Lys
      115

```

&lt;210&gt; 2683

&lt;211&gt; 498

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2683

```

naccggttac actgactcca aaactctcct tgggtggccta ggtgaaacct catggccaac
60
atcacctgga tggccaacca cactggaagg ttggatttca tcctcatggg actcttcaga
120
cgatccaaac atccagctct acttagtggt gtcattcttg tggttttcct gatggcggtg
180
tctgaaaatg ctgtcctgat ccttctgata cactgtgaca cctacctcca caccctcatg
240
tactttttca tcagtcaatt gtctctcatg gacatggcgt acatttctgt cactgtgccc
300
aagatgctcc tggaccaggt catgggtgtg aataagatct cagccctga gtgtgggatg
360
cagatgttcc tctatctgac actagcaggt tcggaatctt tccttctagc caccatggcc
420
tatgaccgct acgtggccat ctgccatcct ctccgttacc ctgtcctcat gaaccatagg
480
gtctgtcttt tcctggca
498

```

&lt;210&gt; 2684

&lt;211&gt; 149

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2684

```

Met Ala Asn Ile Thr Trp Met Ala Asn His Thr Gly Arg Leu Asp Phe
 1          5          10          15
Ile Leu Met Gly Leu Phe Arg Arg Ser Lys His Pro Ala Leu Leu Ser
      20          25          30
Val Val Ile Phe Val Val Phe Leu Met Ala Leu Ser Glu Asn Ala Val
      35          40          45
Leu Ile Leu Leu Ile His Cys Asp Thr Tyr Leu His Thr Pro Met Tyr
      50          55          60
Phe Phe Ile Ser Gln Leu Ser Leu Met Asp Met Ala Tyr Ile Ser Val
65          70          75          80
Thr Val Pro Lys Met Leu Leu Asp Gln Val Met Gly Val Asn Lys Ile

```

```

      85              90              95
Ser Ala Pro Glu Cys Gly Met Gln Met Phe Leu Tyr Leu Thr Leu Ala
      100              105              110
Gly Ser Glu Phe Phe Leu Leu Ala Thr Met Ala Tyr Asp Arg Tyr Val
      115              120              125
Ala Ile Cys His Pro Leu Arg Tyr Pro Val Leu Met Asn His Arg Val
      130              135              140
Cys Leu Phe Leu Ala
145

```

<210> 2685  
 <211> 391  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2685
ngccggctgc acacgctgcc acctgggctg cctcgaaatg tccatgtgct gaaggccaag
60
cgcaatgagc tggctgccct ggcacgaggg gcgctggcgg gcatggctca gcttcgggaa
120
ctctacctca caggcaaccg actgcgaagc cgggccctgg gccccctgc ctgggtggac
180
ctcgcccatc tgcagttgct ggacatcgcc gggaatcagc tcacagagat cccggagggg
240
ctccccccat cgctggagta tctgtacctg cagaataaca agattagcgc tgttcctgcc
300
agcgcccttg actctactcc caacctcaag gggatcttcc tcagggtcaa caagctggct
360
gtgggctccg tagtagaaag cgccttcggg a
391

```

<210> 2686  
 <211> 130  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2686
Xaa Arg Leu His Thr Leu Pro Pro Gly Leu Pro Arg Asn Val His Val
1      5      10      15
Leu Lys Val Lys Arg Asn Glu Leu Ala Ala Leu Ala Arg Gly Ala Leu
      20      25      30
Ala Gly Met Ala Gln Leu Arg Glu Leu Tyr Leu Thr Gly Asn Arg Leu
      35      40      45
Arg Ser Arg Ala Leu Gly Pro Arg Ala Trp Val Asp Leu Ala His Leu
      50      55      60
Gln Leu Leu Asp Ile Ala Gly Asn Gln Leu Thr Glu Ile Pro Glu Gly
      65      70      75      80
Leu Pro Pro Ser Leu Glu Tyr Leu Tyr Leu Gln Asn Asn Lys Ile Ser
      85      90      95
Ala Val Pro Ala Ser Ala Phe Asp Ser Thr Pro Asn Leu Lys Gly Ile
      100      105      110
Phe Leu Arg Phe Asn Lys Leu Ala Val Gly Ser Val Val Glu Ser Ala
      115      120      125
Phe Arg

```

130

&lt;210&gt; 2687

&lt;211&gt; 399

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2687

nagtgaaga aatgtttaat acaagagatt gaaccctacc aaaatgggag gtttagcctc  
 60  
 caggaatggg agtgcaataa atctctaata caagagattg agcctcacca acctccagga  
 120  
 tgggaaatga caggtaagac agggactaca aaagaccaag cagacaataa aattccccct  
 180  
 gacagtccgc taggccttat gttaagatac cggaaagata atgaaaggac caaacacaag  
 240  
 aaaagacagc aaatgataaa atattgctgg tttatttga ctaaggaacc catcctgaaa  
 300  
 cctttgtct tttggccaca gttagggttg agcggggact ggatatgcca actcctaate  
 360  
 cagtatgtaa aggataaaag tccagtttct caagaggag  
 399

&lt;210&gt; 2688

&lt;211&gt; 91

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2688

Met	Thr	Gly	Lys	Thr	Gly	Thr	Thr	Lys	Asp	Gln	Ala	Asp	Asn	Lys	Ile
1			5					10					15		
Pro	Pro	Asp	Ser	Pro	Leu	Gly	Leu	Met	Leu	Arg	Tyr	Arg	Lys	Asp	Asn
			20					25					30		
Glu	Arg	Thr	Lys	His	Lys	Lys	Arg	Gln	Gln	Met	Ile	Lys	Tyr	Cys	Trp
			35				40					45			
Phe	Ile	Trp	Thr	Lys	Glu	Pro	Ile	Leu	Lys	Pro	Leu	Val	Phe	Trp	Pro
			50				55				60				
Gln	Leu	Gly	Leu	Ser	Gly	Asp	Trp	Ile	Cys	Gln	Leu	Leu	Ile	Gln	Tyr
65				70				75						80	
Val	Lys	Asp	Lys	Ser	Pro	Val	Ser	Gln	Glu	Glu					
				85				90							

&lt;210&gt; 2689

&lt;211&gt; 560

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2689

gcacccattc aagttggggt agttggcttc tgtttggtgt ttgctacacc cctgtgttgt  
 60  
 gccctgtttc ctcagaaaaag atacaaaaat gtgggtctca ccaagttgcc caggctggtc  
 120  
 tcaaactcct ggcctcaaga aatcctctcg gttcagcctc acaaagctcc gagattacag  
 180

1927

ttgcatgtct gtgacaagct tggaggccga gttgcaagct aagatccaag agagccatcc  
 240  
 tgaattgcga cgcgtgtact tcaataaggg attgtaaagc agggaggaaa cctctgcagc  
 300  
 tcattctgcc actgcaaagc tgggtgtacc atgctgggtga gaaaaatcct gttcaacctg  
 360  
 gggttggtata tcgtctttga aaaacaatga ctataaaaagc tacaggaaaag gtatttcagg  
 420  
 acgttttattg aaggcattgg tggagctctc tgtatgtgtt ttgctctgca gggaaactcaa  
 480  
 agttggcatt cccgtcacgg atgagaatgg gaaccgcttg ggggagtcgg cgaacgctgc  
 540  
 gaaacaagcc atcacgccag  
 560

<210> 2690

<211> 73

<212> PRT

<213> Homo sapiens

<400> 2690

Ala	Pro	Ile	Gln	Val	Gly	Leu	Val	Gly	Phe	Cys	Leu	Val	Phe	Ala	Thr
1				5				10					15		
Pro	Leu	Cys	Cys	Ala	Leu	Phe	Pro	Gln	Lys	Arg	Tyr	Lys	Asn	Val	Gly
		20						25					30		
Leu	Thr	Lys	Leu	Pro	Arg	Leu	Val	Ser	Asn	Ser	Trp	Pro	Gln	Glu	Ile
		35					40					45			
Leu	Leu	Val	Gln	Pro	His	Lys	Ala	Pro	Arg	Leu	Gln	Leu	His	Val	Cys
	50					55					60				
Asp	Lys	Leu	Gly	Gly	Arg	Val	Ala	Ser							
65					70										

<210> 2691

<211> 532

<212> DNA

<213> Homo sapiens

<400> 2691

gatctcatct gtacacactt catggatggc atgaatgagc tggcgattgc ttacatcctg  
 60  
 caggggggtgc tgaaggccct cgactacatc caccacatgg gatatgtaca caggagtgtc  
 120  
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<210> 2692  
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<212> PRT  
<213> Homo sapiens

<400> 2692  
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Met Gly Tyr Val His Arg Ser Val Lys Ala Ser His Ile Leu Ile Ser  
35 40 45  
Val Asp Gly Lys Val Tyr Leu Ser Gly Leu Arg Ser Asn Leu Ser Met  
50 55 60  
Ile Ser His Gly Gln Arg Gln Arg Val Val His Asp Phe Pro Lys Tyr  
65 70 75 80  
Ser Val Lys Val Leu Pro Trp Leu Ser Pro Glu Val Leu Gln Gln Asn  
85 90 95  
Leu Gln Gly Tyr Asp Ala Lys Ser Asp Ile Tyr Ser Val Gly Ile Thr  
100 105 110  
Ala Cys Glu Leu Ala Asn Gly His Val Pro Phe Lys Asp Met Pro Ala  
115 120 125  
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<210> 2693  
<211> 798  
<212> DNA  
<213> Homo sapiens

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<210> 2694

<211> 266

<212> PRT

<213> Homo sapiens

<400> 2694

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Thr	Ile	His	Phe	Tyr	Asp	Asn	Pro	Ile	Gln	Phe	Val	Gly	Arg	Ser	Ala
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Phe	Gln	Tyr	Leu	Pro	Lys	Leu	His	Thr	Leu	Ser	Leu	Asn	Gly	Ala	Met
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Asp	Ile	Gln	Glu	Phe	Pro	Asp	Leu	Lys	Gly	Thr	Thr	Ser	Leu	Glu	Ile
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Leu	Thr	Leu	Thr	Arg	Ala	Gly	Ile	Arg	Leu	Leu	Pro	Ser	Gly	Met	Cys
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Gln	Gln	Leu	Pro	Arg	Leu	Arg	Val	Leu	Glu	Leu	Ser	His	Asn	Gln	Ile
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Glu	Glu	Leu	Pro	Ser	Leu	His	Arg	Cys	Gln	Lys	Leu	Glu	Glu	Ile	Gly
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Leu	Ser	Ser	Leu	Gln	Ala	Leu	Asp	Leu	Arg	Trp	Asn	Ala	Ile	Arg	Ser
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Ile	His	Pro	Glu	Ala	Phe	Ser	Thr	Leu	His	Ser	Leu	Val	Lys	Leu	Asp
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Leu	Thr	Asp	Asn	Gln	Leu	Thr	Thr	Leu	Pro	Leu	Ala	Gly	Leu	Gly	Gly
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Leu	Met	His	Leu	Lys	Leu	Lys	Gly	Asn	Leu	Ala	Leu	Ser	Gln	Ala	Phe
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Ser	Lys	Asp	Ser	Phe	Pro	Lys	Leu	Arg	Ile						



260

265

&lt;210&gt; 2695

&lt;211&gt; 2265

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2695

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1931

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 <211> 663  
 <212> PRT  
 <213> Homo sapiens

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 Ala Pro Glu Asp Cys Thr Ser Phe Ser Ile Asn Ala Ser Pro Gly Val  
 35 40 45  
 Val Val Asp Ile Ala His Ser Pro Pro Ala Lys Lys Lys Ser Thr Gly  
 50 55 60  
 Ser Ser Thr Trp Pro Leu Asp Pro Gly Val Glu Val Thr Leu Thr Met  
 65 70 75 80  
 Lys Ala Ala Ser Gly Ser Thr Gly Asp Gln Lys Val Gln Ile Ser Tyr  
 85 90 95  
 Tyr Gly Pro Lys Thr Pro Pro Val Lys Ala Leu Leu Tyr Leu Thr Ala  
 100 105 110  
 Val Glu Ile Ser Leu Cys Ala Asp Ile Thr Arg Thr Gly Lys Val Lys  
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 Pro Thr Arg Ala Val Lys Asp Gln Arg Thr Trp Thr Trp Gly Pro Cys

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Ser Ser Ala Met Asp Cys Glu Asp Asp Glu Val Leu Asp Ser Glu Asp				
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Leu Gln Asp Met Ser Leu Met Thr Leu Ser Thr Lys Thr Pro Lys Asp				
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Phe Phe Thr Asn His Thr Leu Val Leu His Val Ala Arg Ser Glu Met				
	195		200	205
Asp Lys Val Arg Val Phe Gln Ala Thr Arg Gly Lys Leu Ser Ser Lys				
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Cys Ser Val Val Leu Gly Pro Lys Trp Pro Ser His Tyr Leu Met Val				
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Pro Gly Gly Lys His Asn Met Asp Phe Tyr Val Glu Ala Leu Ala Phe				
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Pro Asp Thr Asp Phe Pro Gly Leu Ile Thr Leu Thr Ile Ser Leu Leu				
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Asp Thr Ser Asn Leu Glu Leu Pro Glu Ala Val Val Phe Gln Asp Ser				
	275		280	285
Val Val Phe Arg Val Ala Pro Trp Ile Met Thr Pro Asn Thr Gln Pro				
	290		295	300
Pro Gln Glu Val Tyr Ala Cys Ser Ile Phe Glu Asn Glu Asp Phe Leu				
	305		310	315
Lys Ser Val Thr Thr Leu Ala Met Lys Ala Lys Cys Lys Leu Thr Ile				
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Cys Pro Glu Glu Glu Asn Met Asp Asp Gln Trp Met Gln Asp Glu Met				
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Glu Ile Gly Tyr Ile Gln Ala Pro His Lys Thr Leu Pro Val Val Phe				
	355		360	365
Asp Ser Pro Arg Asn Arg Gly Leu Lys Glu Phe Pro Ile Lys Arg Val				
	370		375	380
Met Gly Pro Asp Phe Gly Tyr Val Thr Arg Gly Pro Gln Thr Gly Gly				
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Ile Ser Gly Leu Asp Ser Phe Gly Asn Leu Glu Val Ser Pro Pro Val				
	405		410	415
Thr Val Arg Gly Lys Glu Tyr Pro Leu Gly Arg Ile Leu Phe Gly Asp				
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Ser Cys Tyr Pro Ser Asn Asp Ser Arg Gln Met His Gln Ala Leu Gln				
	435		440	445
Asp Phe Leu Ser Ala Gln Gln Val Gln Ala Pro Val Lys Leu Tyr Ser				
	450		455	460
Asp Trp Leu Ser Val Gly His Val Asp Glu Phe Leu Ser Phe Val Pro				
	465		470	475
Ala Pro Asp Arg Lys Gly Phe Arg Leu Leu Leu Ala Ser Pro Arg Ser				
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Cys Tyr Lys Leu Phe Gln Glu Gln Gln Asn Glu Gly His Gly Glu Ala				
	500		505	510
Leu Leu Phe Glu Gly Ile Lys Lys Lys Gln Gln Lys Ile Lys Asn				
	515		520	525
Ile Leu Ser Asn Lys Thr Leu Arg Glu His Asn Ser Phe Val Glu Arg				
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Cys Ile Asp Trp Asn Arg Glu Leu Leu Lys Arg Glu Leu Gly Leu Ala				
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<212> DNA
<213> Homo sapiens
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2468

&lt;210&gt; 2698

&lt;211&gt; 332

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2698

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 Gly Arg Ala Asn His Phe Phe Thr Val Thr Asp Pro Arg Asn Ile Leu  
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 Leu Thr Asn Glu Gln Leu Glu Ser Ala Arg Lys Ile Val His Asp Tyr  
 50 55 60  
 Arg Gln Gly Ile Val Pro Pro Gly Leu Thr Glu Asn Glu Leu Trp Arg  
 65 70 75 80  
 Ala Lys Tyr Ile Tyr Asp Ser Ala Phe His Pro Asp Thr Gly Glu Lys  
 85 90 95  
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 Asn Arg Ser Gly Asp Ala Pro Leu Thr Val Asn Glu Leu Gly Thr Ala  
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 Tyr Val Ser Ala Thr Thr Gly Ala Val Ala Thr Ala Leu Gly Leu Asn  
 165 170 175  
 Ala Leu Thr Lys His Val Ser Pro Leu Ile Gly Arg Phe Val Pro Phe  
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 Val Ser Arg Ile Leu Met Ala Ala Pro Gly Met Ala Ile Pro Pro Phe  
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&lt;210&gt; 2699

&lt;211&gt; 974

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2699

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<210> 2700

<211> 177

<212> PRT

<213> Homo sapiens

<400> 2700

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Thr	Gln	Pro	Ala	Asp	Val	Leu	Arg	Trp	Ser	Ala	Gly	Tyr	Phe	Ser	Ala
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Leu	Ser	Arg	Gly	Asp	Pro	Leu	Pro	Val	Lys	Asp	Arg	Met	Glu	Met	Pro
		50				55					60				
Val	Ala	Thr	Gln	Lys	Thr	Asp	Thr	Gly	Leu	Thr	Gln	Gly	Leu	Leu	Lys
65				70				75						80	
Val	Leu	His	Lys	Gln	Cys	His	His	Lys	Arg	Tyr	Val	Glu	Leu	Thr	Asp
			85					90						95	
Leu	Glu	Gln	Lys	Trp	Lys	Asn	Leu	Cys	Leu	Pro	Lys	Glu	Lys	Phe	Lys
		100				105							110		
Ala	Leu	Leu	Gln	Leu	Asp	Pro	Cys	Glu	Asn	Lys	Ile	Lys	Trp	Ile	Asn

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      115              120              125
Phe Leu Ala Leu Gly Cys Ser Met Leu Gly Gly Ser Leu Asn Thr Ala
   130              135              140
Leu Lys His Leu Cys Glu Ile Leu Thr Asp Asp Pro Glu Ala Gly Pro
   145              150              155              160
Leu Ala Ser Pro Ser Arg Arg Phe Pro Thr Phe Thr Ala Thr Trp Pro
              165              170              175
Asp

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<210> 2701  
 <211> 646  
 <212> DNA  
 <213> Homo sapiens

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480
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540
ctggagagag atcgattgaa atacgaatcc cagaaatcta aatccagcag cgtggctgtc
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<210> 2702  
 <211> 92  
 <212> PRT  
 <213> Homo sapiens

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<400> 2702
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Leu Gly Pro Gly Asp Gln Glu Ser Arg Trp Lys Gln Tyr Leu Glu Asp
      20              25              30
Glu Arg Ile Ala Leu Phe Leu Gln Asn Glu Glu Phe Met Lys Glu Leu
      35              40              45
Gln Arg Asn Arg Asp Phe Leu Leu Ala Leu Glu Arg Asp Arg Leu Lys
      50              55              60
Tyr Glu Ser Gln Lys Ser Lys Ser Ser Val Ala Val Gly Asn Asp

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65          70          75          80
Phe Gly Phe Ser Ser Pro Val Pro Gly Thr Gly Asp
          85          90

<210> 2703
<211> 610
<212> DNA
<213> Homo sapiens

<400> 2703
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120
ataaaatgca aaccaccctt ctgtagcaac tcacccatct gcctgcgccg tgaatgttcg
180
ggcccttggg gaaaagggtt cttgccccca gaaggaaact tgctcccaag gcctttgtct
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300
catcttcttc aagccccacc tgcagcgtcc taggcaaggc cctgccagag atgctagctc
360
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420
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480
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610

<210> 2704
<211> 108
<212> PRT
<213> Homo sapiens

<400> 2704
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Ser Val Val Ser Leu Ala Thr Gly Ala Gly Ala Ile Tyr Leu Leu Tyr
          20          25          30
Lys Ala Ile Lys Ala Gly Ile Lys Cys Lys Pro Pro Leu Cys Ser Asn
          35          40          45
Ser Pro Ile Cys Ile Ala Arg Glu Cys Ser Gly Pro Trp Gly Lys Gly
          50          55          60
Leu Leu Pro Pro Glu Gly Thr Leu Leu Pro Arg Pro Leu Leu Gly Glu
65          70          75          80
Gly Pro Lys Gly Glu Ala Ser Lys Phe Pro Leu Phe Phe Asp Leu Ser
          85          90          95
Leu Val His Leu Pro Gln Ala His Pro Ala Ala Ser
          100          105

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<210> 2705  
 <211> 843  
 <212> DNA  
 <213> Homo sapiens

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 420  
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 843

<210> 2706  
 <211> 251  
 <212> PRT  
 <213> Homo sapiens

<400> 2706  
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 Thr Val Thr Asp Pro Arg Asn Leu Leu Ser Gly Ala Gln Leu Glu  
 35 40 45  
 Ala Ser Arg Asn Ile Val Gln Asn Tyr Arg Ala Gly Val Val Thr Pro  
 50 55 60  
 Gly Ile Thr Glu Asp Gln Leu Trp Arg Ala Lys Tyr Val Tyr Asp Ser  
 65 70 75 80  
 Ala Phe His Pro Asp Thr Gly Glu Lys Val Val Leu Ile Gly Arg Met

				85				90					95				
Ser	Ala	Gln	Val	Pro	Met	Asn	Met	Thr	Ile	Thr	Gly	Cys	Met	Leu	Thr		
			100					105					110				
Phe	Tyr	Arg	Lys	Thr	Pro	Thr	Val	Val	Phe	Trp	Gln	Trp	Val	Asn	Gln		
			115				120					125					
Ser	Phe	Asn	Ala	Ile	Val	Asn	Tyr	Ser	Asn	Arg	Ser	Gly	Asp	Thr	Pro		
			130			135					140						
Ile	Thr	Val	Arg	Gln	Leu	Gly	Thr	Ala	Tyr	Val	Ser	Ala	Thr	Thr	Gly		
145					150					155					160		
Ala	Val	Ala	Thr	Ala	Leu	Gly	Leu	Lys	Ser	Leu	Thr	Lys	His	Leu	Pro		
				165				170						175			
Pro	Leu	Val	Gly	Arg	Phe	Val	Pro	Phe	Ala	Ala	Val	Ala	Ala	Ala	Asn		
				180				185					190				
Cys	Ile	Asn	Ile	Pro	Leu	Met	Arg	Gln	Arg	Glu	Leu	Gln	Val	Gly	Ile		
		195				200						205					
Pro	Val	Thr	Asp	Glu	Ala	Gly	Gln	Arg	Leu	Gly	His	Ser	Val	Thr	Ala		
		210				215					220						
Ala	Lys	Gln	Gly	Ile	Phe	Gln	Val	Val	Val	Ser	Arg	Ile	Gly	Met	Ala		
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<210> 2707
<211> 2921
<212> DNA
<213> Homo sapiens
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780

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<210> 2708

<211> 337

<212> PRT

<213> Homo sapiens

<400> 2708

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			20				25					30			
Ala	Ala	Arg	Leu	Ala	Cys	Ser	Ala	Pro	Thr	Pro	Gly	Gly	Gly	Thr	Met
			35				40					45			
Pro	Phe	Asp	Phe	Arg	Arg	Phe	Asp	Ile	Tyr	Arg	Lys	Val	Pro	Lys	Asp
	50					55				60					
Leu	Thr	Gln	Pro	Thr	Tyr	Thr	Gly	Ala	Ile	Ile	Ser	Ile	Cys	Cys	Cys
65					70					75					80
Leu	Phe	Ile	Leu	Phe	Leu	Phe	Leu	Ser	Glu	Leu	Thr	Gly	Phe	Ile	Thr
				85					90					95	
Thr	Glu	Val	Val	Asn	Glu	Leu	Tyr	Val	Asp	Asp	Pro	Asp	Lys	Asp	Ser
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			115				120					125			
Cys	Glu	Leu	Val	Gly	Leu	Asp	Ile	Gln	Asp	Glu	Met	Gly	Arg	His	Glu
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Val	Gly	His	Ile	Asp	Asn	Ser	Met	Lys	Ile	Pro	Leu	Asn	Asn	Gly	Ala
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				165					170					175	
Phe	His	Val	Ser	Thr	His	Ser	Ala	Thr	Ala	Gln	Pro	Gln	Asn	Pro	Asp
			180				185						190		
Met	Thr	His	Val	Ile	His	Lys	Leu	Ser	Phe	Gly	Asp	Thr	Leu	Gln	Val
			195				200					205			
Gln	Asn	Ile	His	Gly	Ala	Phe	Asn	Ala	Leu	Gly	Gly	Ala	Asp	Arg	Leu
			210				215					220			
Thr	Ser	Asn	Pro	Leu	Ala	Ser	His	Asp	Tyr	Ile	Leu	Lys	Ile	Val	Pro

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Thr	Val	Tyr	Glu	Asp	Lys	Ser	Gly	Lys	Gln	Arg	Tyr	Ser	Tyr	Gln	Tyr
			245						250					255	
Thr	Val	Ala	Asn	Lys	Glu	Tyr	Val	Ala	Tyr	Ser	His	Thr	Gly	Arg	Ile
			260						265					270	
Ile	Pro	Ala	Ile	Trp	Phe	Arg	Tyr	Asp	Leu	Ser	Pro	Ile	Thr	Val	Lys
			275					280					285		
Tyr	Thr	Glu	Arg	Arg	Gln	Pro	Leu	Tyr	Arg	Phe	Ile	Thr	Thr	Ile	Cys
			290				295					300			
Ala	Ile	Ile	Gly	Gly	Thr	Phe	Thr	Val	Ala	Gly	Ile	Leu	Asp	Ser	Cys
			305				310				315			320	
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			325					330						335	

His

&lt;210&gt; 2709

&lt;211&gt; 984

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2709

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180  
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984

<210> 2710  
<211> 242  
<212> PRT  
<213> Homo sapiens

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35 40 45  
Ala Ser Gly Gln Ala Lys Ser Ser Ser Lys Glu Ser Lys Asp Ser Lys  
50 55 60  
Thr Ser Ser Lys Asp Asp Lys Gly Ser Thr Ser Ser Thr Ser Gly Ser  
65 70 75 80  
Ser Gly Ser Ser Thr Lys Asn Ile Trp Val Ser Gly Leu Ser Ser Asn  
85 90 95  
Thr Lys Ala Ala Asp Leu Lys Asn Leu Phe Gly Lys Tyr Gly Lys Val  
100 105 110  
Leu Ser Ala Lys Val Val Thr Asn Ala Arg Ser Pro Gly Ala Lys Cys  
115 120 125  
Tyr Gly Ile Val Thr Met Ser Ser Ser Thr Glu Val Ser Arg Cys Ile  
130 135 140  
Ala His Leu His Arg Thr Glu Leu His Gly Gln Leu Ile Ser Val Glu  
145 150 155 160  
Lys Val Lys Gly Asp Pro Ser Lys Lys Glu Met Lys Lys Glu Asn Asp  
165 170 175  
Glu Lys Ser Ser Ser Arg Ser Ser Gly Asp Lys Lys Asn Thr Ser Asp  
180 185 190  
Arg Ser Ser Lys Thr Gln Ala Ser Val Lys Lys Glu Glu Lys Arg Ser  
195 200 205  
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<210> 2711  
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<212> DNA  
<213> Homo sapiens

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6536

&lt;210&gt; 2712

&lt;211&gt; 2096

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2712

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Cys Ile Met Ala Lys Ala Ser Ser Asp Val Gln Val Ser Gly Phe His
      20           25           30
Arg Lys Ile Gln His Val Lys Asn Glu Leu Cys His Met Leu Ser Leu
      35           40           45
Glu Glu Val Ala Pro Val Leu Gln Gln Thr Leu Leu Gln Asp Asn Leu
      50           55           60
Leu Gly Arg Val His Phe Asp Gln Phe Lys Glu Ala Leu Ile Leu Ile
      65           70           75           80
Leu Ser Arg Thr Leu Ser Asp Glu Glu His Phe Gln Glu Pro Asp Cys
      85           90           95
Ser Leu Glu Ala Gln Pro Arg Tyr Val Arg Gly Glu Lys Pro Tyr Gly
      100          105          110
Arg Arg Ser Leu Pro Glu Phe Gln Glu Ser Val Glu Glu Phe Pro Glu
      115          120          125
Val Thr Val Ile Glu Pro Leu Asp Glu Glu Ala Arg Pro Ser His Ile
      130          135          140
Pro Ala Gly Asp Cys Ser Glu His Trp Lys Thr Gln Arg Ser Glu Glu
      145          150          155          160
Tyr Glu Ala Glu Gly Gln Leu Arg Phe Trp Asn Pro Asp Asp Leu Asn
      165          170          175
Ala Ser Gln Ser Gly Ser Ser Pro Pro Gln Asp Trp Ile Glu Glu Lys
      180          185          190
Leu Gln Gln Val Cys Glu Asp Leu Gly Ile Thr Pro Asp Gly His Leu
      195          200          205
Asn Arg Lys Lys Leu Val Ser Ile Cys Glu Gln Tyr Gly Leu Gln Asn
      210          215          220
Val Asp Gly Glu Met Leu Glu Glu Val Phe His Asn Leu Asp Pro Asp
      225          230          235          240
Gly Thr Met Ser Val Glu Asp Phe Phe Tyr Gly Leu Phe Lys Asn Gly
      245          250          255
Lys Ser Leu Thr Pro Ser Ala Ser Thr Pro Tyr Arg Gln Leu Lys Arg
      260          265          270
His Leu Ser Met Gln Ser Phe Asp Glu Ser Gly Arg Arg Thr Thr Thr
      275          280          285
Ser Ser Ala Thr Thr Ser Thr Ile Gly Phe Arg Val Phe Ser Cys Leu
      290          295          300
Asp Asp Gly Met Gly His Ala Ser Val Glu Arg Ile Leu Asp Thr Trp
      305          310          315          320
Gln Glu Glu Gly Ile Glu Asn Ser Gln Glu Ile Leu Lys Ala Leu Asp
      325          330          335
Phe Ser Leu Asp Gly Asn Ile Asn Leu Thr Glu Leu Thr Leu Ala Leu
      340          345          350
Glu Asn Glu Leu Leu Val Thr Lys Asn Ser Ile His Gln Ala Ala Leu
      355          360          365
Ala Ser Phe Lys Ala Glu Ile Arg His Leu Leu Glu Arg Val Asp Gln
      370          375          380
Val Val Arg Glu Lys Arg Ser Tyr Gly Arg Ile Trp Thr Ala Glu Lys
      385          390          395          400
Leu Lys Ser Leu Met Ala Ser Glu Val Asp Asp His Asp Ala Ala Ile

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Ile	Leu	Gln	Gln	Ala	Gly	Lys	Gln	Arg	Leu	Glu	Leu	Glu	Gln	Glu	Ile														
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Glu	Lys	Ala	Lys	Thr	Glu	Glu	Asn	Tyr	Ile	Arg	Asp	Arg	Leu	Ala	Leu														
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Ser	Leu	Lys	Glu	Asn	Ser	Arg	Leu	Glu	Asn	Glu	Leu	Leu	Glu	Asn	Ala														
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Glu	Lys	Leu	Ala	Glu	Tyr	Glu	Asn	Leu	Thr	Asn	Lys	Leu	Gln	Arg	Asn														
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Leu	Glu	Asn	Val	Leu	Ala	Glu	Lys	Phe	Gly	Asp	Leu	Asp	Pro	Ser	Ser														
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Ala	Glu	Phe	Phe	Leu	Gln	Glu	Glu	Arg	Leu	Thr	Gln	Met	Arg	Asn	Glu														
										530				535				540											
Tyr	Glu	Arg	Gln	Cys	Arg	Val	Leu	Gln	Asp	Gln	Val	Asp	Glu	Leu	Gln														
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Ser	Glu	Leu	Glu	Glu	Tyr	Arg	Ala	Gln	Gly	Arg	Val	Leu	Arg	Leu	Pro														
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Leu	Lys	Asn	Ser	Pro	Ser	Glu	Glu	Val	Glu	Ala	Asn	Ser	Gly	Gly	Ile														
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Glu	Pro	Glu	His	Gly	Leu	Gly	Ser	Glu	Glu	Cys	Asn	Pro	Leu	Asn	Met														
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Ser	Ile	Glu	Ala	Glu	Leu	Val	Ile	Glu	Gln	Met	Lys	Glu	Gln	His	His														
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Arg	Asp	Ile	Cys	Cys	Leu	Arg	Leu	Glu	Leu	Glu	Asp	Lys	Val	Arg	His														
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Tyr	Glu	Lys	Gln	Leu	Asp	Glu	Thr	Val	Val	Ser	Cys	Lys	Lys	Ala	Gln														
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Glu	Asn	Met	Lys	Gln	Arg	His	Glu	Asn	Glu	Thr	His	Thr	Leu	Glu	Glu														
										660				665				670											
Gln	Ile	Ser	Asp	Leu	Lys	Met	Lys	Ile	Ala	Glu	Leu	Gln	Gly	Gln	Ala														
										675				680				685											
Ala	Val	Leu	Lys	Glu	Ala	His	Glu	Ala	Thr	Cys	Arg	His	Glu	Glu															
										690				695				700											
Glu	Lys	Lys	Gln	Leu	Gln	Val	Lys	Leu	Glu	Glu	Glu	Lys	Thr	His	Leu														
										705				710				7											

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Leu Lys Asp Leu Gln Glu Gln Gln Arg Glu Glu Lys Ser Gln Trp Glu		
850	855	860
Phe Glu Lys Asp Glu Leu Thr Gln Glu Cys Ala Glu Ala Gln Glu Leu		
870	875	880
Leu Lys Glu Thr Leu Lys Arg Glu Lys Thr Thr Ser Leu Val Leu Thr		
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Gln Glu Arg Glu Met Leu Glu Lys Thr Tyr Lys Asp His Leu Asn Ser		
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Met Val Val Glu Arg Gln Gln Leu Leu Gln Asp Leu Glu Asp Leu Arg		
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Asn Val Ser Glu Thr Gln Gln Ser Leu Leu Ser Asp Gln Ile Leu Glu		
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Leu Lys Ser Ser His Lys Arg Glu Leu Arg Glu Arg Glu Glu Val Leu		
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Cys Gln Gln Gly Val Ser Glu Gln Leu Ala Ser Gln Arg Leu Glu Arg		
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Leu Ala Met Glu Asn Ile His Lys Ala Thr Cys Glu Thr Ala Asp Arg		
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Glu Arg Ala Glu Met Ser Thr Glu Ile Ser Arg Leu Gln Ser Lys Ile		
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Lys Glu Met Gln Gln Ala Thr Ser Pro Leu Ser Met Leu Gln Ser Gly		
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Cys Gln Val Ile Gly Glu Glu Glu Val Glu Gly Asp Gly Ala Leu Ser		
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Leu Leu Gln Lys Gly Glu Gln Leu Leu Glu Glu Asn Gly Asp Val Leu		
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Leu Ser Leu Gln Arg Ala His Glu Gln Ala Val Lys Glu Asn Val Lys		
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Met Ala Thr Glu Ile Ser Arg Leu Gln Gln Arg Leu Gln Lys Leu Glu		
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Glu Asp Asp Glu Val Arg Asp Leu Gly Ser Thr Gly Thr Ser Ser Val		
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Gln Arg Gln Glu Val Lys Ile Glu Glu Ser Glu Ala Ser Val Glu Gly		
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Ile Ser Glu Leu Lys Ile Lys Asn Gln Gln Leu Asp Leu Glu Asn Thr			
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Ala Ser Leu Lys Thr Gln Leu Val Ala Ser Gln Glu Lys Val Gln Asn
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Ser Asp Pro Arg Val Thr Gln Gln Glu Lys Glu Ala Leu Lys Gln Glu
1795      1800      1805
Val Met Pro Leu His Lys Gln Leu Gln Asn Ser Val Xaa Lys Ser Trp
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Ala Pro Glu Ile Ala Thr His Pro Ser Gly Leu His Asn Gln Gln Lys
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Lys Ala Glu Leu Thr His Ser Arg Glu Lys Val Arg Gln Leu Glu Ser
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Asn Leu Leu Pro Lys His Gln Lys His Leu Asn Pro Ser Gly Thr Met
1890      1895      1900
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2035      2040      2045
Val Glu Gln Lys Leu Lys Leu Val Lys Arg Leu Leu Gln Glu Lys Val
2050      2055      2060
Asn Gln Leu Lys Glu Gln Val Ser Leu Pro Gly His Leu Cys Ser Pro
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2085      2090      2095

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<210> 2713
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<212> DNA
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<211> 214

<212> PRT

<213> Homo sapiens

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 35 40 45  
 Thr Gly Leu Tyr Glu Tyr Lys Val Phe Gly Val Leu Glu Asp Cys Ser  
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 Pro Thr Leu Leu Ala Asp Ile Tyr Met Asp Ser Asp Tyr Arg Lys Gln  
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 Trp Asp Gln Tyr Val Lys Glu Leu Tyr Glu Gln Glu Cys Asn Gly Glu  
 85 90 95  
 Thr Val Val Tyr Trp Glu Val Lys Tyr Pro Phe Pro Met Ser Asn Arg  
 100 105 110  
 Asp Tyr Val Tyr Leu Arg Gln Arg Arg Asp Leu Asp Met Glu Gly Arg  
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 130 135 140  
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 145 150 155 160  
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 165 170 175  
 Asp Asn Pro Gly Gly Gln Ile Pro Ser Trp Leu Ile Asn Trp Ala Ala  
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<210> 2716  
 <211> 126  
 <212> PRT  
 <213> Homo sapiens

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 Gln Arg Gly Asp Leu Ser Asp Val Glu Glu Glu Glu Glu Glu Met  
 35 40 45  
 Asp Val Asp Glu Ala Thr Gly Ala Val Lys Lys His Asn Gly Val Gly  
 50 55 60  
 Gly Ser Pro Pro Lys Ser Lys Leu Leu Phe Ser Asn Thr Ala Ala Gln  
 65 70 75 80  
 Lys Leu Arg Gly Met Asp Glu Val Tyr Asn Leu Phe Tyr Val Asn Asn  
 85 90 95  
 Asn Trp Tyr Ile Phe Met Arg Leu His Gln Ile Leu Cys Leu Arg Leu  
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<210> 2717  
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 <212> DNA  
 <213> Homo sapiens

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<211> 110

<212> PRT

<213> Homo sapiens

<400> 2718

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Glu	Gly	Pro	Arg	Pro	Glu	Asn	Thr	Leu	Gly	Leu	Ser	Ser	Pro	Ala	Gln
		35				40					45				
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Lys	Thr	Gly	Gly	Gln	Gly	Ser	Asp	Ala	Thr	Leu	Leu	Phe	Val	Lys	Tyr
65				70					75					80	
Gly	Thr	Thr	Phe	Phe	Val	Leu	Phe	Glu	Val	Ser	Ser	Gly	Ser	Lys	Leu
			85					90						95	
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<210> 2719

<211> 546

<212> DNA

<213> Homo sapiens

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 <212> PRT  
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 His Val Leu Val Ala His Arg Thr Asp Asn Lys Val His Met Gly Asp  
 35 40 45  
 Leu Asp Val Pro Leu Glu Gln Glu Met Ala Lys Glu Asp Pro Val Cys  
 50 55 60  
 Ala Pro Glu Ser Met Gly Ser Glu Asp Met Leu Phe Met Leu Tyr Thr  
 65 70 75 80  
 Ser Gly Ser Thr Gly Met Pro Lys Gly Ile Val His Thr Gln Ala Gly  
 85 90 95  
 Tyr Leu Leu Tyr Ala Ala Leu Thr His Lys Leu Val Phe Asp His Gln  
 100 105 110  
 Pro Gly Asp Ile Phe Gly Cys Val Ala Asp Ile Gly Trp Ile Thr Gly  
 115 120 125  
 His Ser Tyr Val Val Tyr Gly Pro Leu Cys Asn Gly Ala Thr Ser Val  
 130 135 140  
 Leu Phe Glu Ser Thr Pro Val Tyr Pro Asn Ala Gly Arg Tyr Trp Glu  
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4860  
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4980  
gccttctccg gatcttttgt tcttctgcac ctcttgtagc tactgccggt gcaagggtgt  
5040  
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5100  
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5160

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 5280  
 aatgttgatt tttttttttt ttacaagtca tcagagatgt ttgcaaagtg agttttatatt  
 5340  
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 5400  
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 5580  
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 5640  
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 5700  
 taatgtttga agatgctgtt ctttgcaagt gtacagtttt caaatgttgt taccagtga  
 5760  
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 5820  
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 5880  
 caaggttttg taacaaaaaa aaaaaaaaaa aa  
 5912

<210> 2722

<211> 508

<212> PRT

<213> Homo sapiens

<400> 2722

Arg Gln Leu Leu Ser Tyr Ala Leu Ile His Pro Ala Thr Ser Leu Glu  
 1 5 10 15  
 Asp Arg Ser Ala Leu Ala Met Trp Leu Asn His Leu Glu Asp Arg Thr  
 20 25 30  
 Ser Thr Ser Phe Gly Gly Gln Asn Arg Gly Arg Ser Asp Ser Val Asp  
 35 40 45  
 Tyr Gly Gln Thr His Tyr Tyr His Gln Arg Gln Asn Ser Asp Asp Lys  
 50 55 60  
 Leu Asn Gly Trp Gln Asn Ser Arg Asp Ser Gly Ile Cys Ile Asn Ala  
 65 70 75 80  
 Ser Asn Trp Gln Asp Lys Ser Met Gly Cys Glu Asn Gly His Val Pro  
 85 90 95  
 Leu Tyr Ser Ser Ser Ser Val Pro Thr Thr Ile Asn Thr Ile Gly Thr  
 100 105 110  
 Ser Thr Ser Thr Asn Val Pro Ala Trp Leu Lys Ser Leu Arg Leu His  
 115 120 125  
 Lys Tyr Ala Ala Leu Phe Ser Gln Met Thr Tyr Glu Glu Met Met Ala  
 130 135 140  
 Leu Thr Glu Cys Gln Leu Glu Ala Gln Asn Val Thr Lys Gly Ala Arg  
 145 150 155 160  
 His Lys Ile Val Ile Ser Ile Gln Lys Leu Lys Glu Arg Gln Asn Leu

```

      165      170      175
Leu Lys Ser Leu Glu Arg Asp Ile Ile Glu Gly Gly Ser Leu Arg Ile
      180      185      190
Pro Leu Gln Glu Leu His Gln Met Ile Leu Thr Pro Ile Lys Ala Tyr
      195      200      205
Ser Ser Pro Ser Thr Thr Pro Glu Ala Arg Arg Arg Glu Pro Gln Ala
      210      215      220
Pro Arg Gln Pro Ser Leu Met Gly Pro Glu Ser Gln Ser Pro Asp Cys
      225      230      235      240
Lys Asp Gly Ala Ala Thr Gly Ala Thr Ala Thr Pro Ser Ala Gly
      245      250      255
Ala Ser Gly Gly Leu Gln Pro His Gln Leu Ser Ser Cys Asp Gly Glu
      260      265      270
Leu Ala Val Ala Pro Leu Pro Glu Gly Asp Leu Pro Gly Gln Phe Thr
      275      280      285
Arg Val Met Gly Lys Val Cys Thr Gln Leu Leu Val Ser Arg Pro Asp
      290      295      300
Glu Glu Asn Ile Ser Ser Tyr Leu Gln Leu Ile Asp Lys Cys Leu Ile
      305      310      315      320
His Glu Ala Phe Thr Glu Thr Gln Lys Lys Arg Leu Leu Ser Trp Lys
      325      330      335
Gln Gln Val Gln Lys Leu Phe Arg Ser Phe Pro Arg Lys Thr Leu Leu
      340      345      350
Asp Ile Ser Gly Tyr Arg Gln Gln Arg Asn Arg Gly Phe Gly Gln Ser
      355      360      365
Asn Ser Leu Pro Thr Ala Gly Ser Val Gly Gly Gly Met Gly Arg Arg
      370      375      380
Asn Pro Arg Gln Tyr Gln Ile Pro Ser Arg Asn Val Pro Ser Ala Arg
      385      390      395      400
Leu Gly Leu Leu Gly Thr Ser Gly Phe Val Ser Ser Asn Gln Arg Asn
      405      410      415
Thr Thr Ala Thr Pro Thr Ile Met Lys Gln Gly Arg Gln Asn Leu Trp
      420      425      430
Phe Ala Asn Pro Gly Gly Ser Asn Ser Met Pro Ser Arg Thr His Ser
      435      440      445
Ser Val Gln Arg Thr Arg Ser Leu Pro Val His Thr Ser Pro Gln Asn
      450      455      460
Met Leu Met Phe Gln Gln Pro Glu Phe Gln Leu Pro Val Thr Glu Pro
      465      470      475      480
Asp Ile Asn Asn Arg Leu Glu Ser Leu Cys Leu Ser Met Thr Glu His
      485      490      495
Ala Leu Gly Asp Gly Val Asp Arg Thr Ser Thr Ile
      500      505

```

&lt;210&gt; 2723

&lt;211&gt; 1221

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2723

ntgatcacgg gggcagccga ctctaaggtg catgtgcacg acctgacagt aaaggagacc

60

atccacatgt ttggagacca cacaaaccgg gtgaagcgca tcgccacagc gcccatgtgg

120

```

cccaacacat tctggagtgc tgctgaggat gggcttatcc gccagtatga ccttcgagag
180
aacagcaaac actcggaggt gctgattgac ctgacagagt actgtggcca gctggaggag
240
gccaaagtgc tcaactgtcaa cccccaggac aacaactgcc tggcagttgg ggccagcggg
300
cccttcgtga ggctctatga catccgatg atccataacc acagaaagag catgaagcag
360
agcccttcag cgggtgtgca caccttctgt gaccggcaga aacccttcc ggacggtgca
420
gccagattt acgtagcagg tcacctgcca gtgaagcttc ctgactacaa caaccgtttg
480
agagtgtctg ttgccaccta tgtgacctc agccccaatg gcacagagct actagtcaac
540
atgggggggg aacaggtcta ttgtttgac ttgacttaca agcagcggcc gtacaccttc
600
ctcttcgcta gaaaatgcca ctctcgggg gaagtccaga atggcaagat gtccaccaac
660
ggtgtgtcca acggtgtgtc caatggcctg caccttcata gcaatggctt ccggtgtcgg
720
gagagttagg gacatgtcag cccccaagta gagctaccac catacctgga gcgtgtgaaa
780
cagcaagcca atgaggtctt tgcctgccag cagtggaccc aagccattca gctttacagc
840
aaggctgtgc agaggggccc tcacaatgcc atgctttatg gaaaccgagc agcagcctac
900
atgaagcgca agtgggatgg tgaccactat gatgccctga gggactgcct caagccatc
960
tcctaaacc catgccacct gaaggcacac ttctgcctgg ccgctgcct ctttgagctc
1020
aagtatgtgg ctgaagccct ggagtgcctg gacgacttca aagggaatt tccggagcag
1080
gcccacagca gcgtttgtga tgcattgggc cgcgacatca cagctgcct cttctctaaa
1140
aatgatggtg aggagaagaa gggacctggt ggcgcgccc cagtcgcct ccgcagcagc
1200
agccgcaagg gatgcacgcg t
1221

```

&lt;210&gt; 2724

&lt;211&gt; 404

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2724

```

Gly Ala Ala Asp Ser Lys Val His Val His Asp Leu Thr Val Lys Glu
  1             5             10            15
Thr Ile His Met Phe Gly Asp His Thr Asn Arg Val Lys Arg Ile Ala
          20             25            30
Thr Ala Pro Met Trp Pro Asn Thr Phe Trp Ser Ala Ala Glu Asp Gly
          35             40            45
Leu Ile Arg Gln Tyr Asp Leu Arg Glu Asn Ser Lys His Ser Glu Val
          50             55            60
Leu Ile Asp Leu Thr Glu Tyr Cys Gly Gln Leu Val Glu Ala Lys Cys

```

```

65          70          75          80
Leu Thr Val Asn Pro Gln Asp Asn Asn Cys Leu Ala Val Gly Ala Ser
      85          90          95
Gly Pro Phe Val Arg Leu Tyr Asp Ile Arg Met Ile His Asn His Arg
      100         105         110
Lys Ser Met Lys Gln Ser Pro Ser Ala Gly Val His Thr Phe Cys Asp
      115         120         125
Arg Gln Lys Pro Leu Pro Asp Gly Ala Ala Gln Tyr Tyr Val Ala Gly
      130         135         140
His Leu Pro Val Lys Leu Pro Asp Tyr Asn Asn Arg Leu Arg Val Leu
      145         150         155
Val Ala Thr Tyr Val Thr Phe Ser Pro Asn Gly Thr Glu Leu Leu Val
      165         170         175
Asn Met Gly Gly Glu Gln Val Tyr Leu Phe Asp Leu Thr Tyr Lys Gln
      180         185         190
Arg Pro Tyr Thr Phe Leu Leu Pro Arg Lys Cys His Ser Ser Gly Glu
      195         200         205
Val Gln Asn Gly Lys Met Ser Thr Asn Gly Val Ser Asn Gly Val Ser
      210         215         220
Asn Gly Leu His Leu His Ser Asn Gly Phe Arg Leu Pro Glu Ser Arg
      225         230         235
Gly His Val Ser Pro Gln Val Glu Leu Pro Pro Tyr Leu Glu Arg Val
      245         250         255
Lys Gln Gln Ala Asn Glu Ala Phe Ala Cys Gln Gln Trp Thr Gln Ala
      260         265         270
Ile Gln Leu Tyr Ser Lys Ala Val Gln Arg Ala Pro His Asn Ala Met
      275         280         285
Leu Tyr Gly Asn Arg Ala Ala Tyr Met Lys Arg Lys Trp Asp Gly
      290         295         300
Asp His Tyr Asp Ala Leu Arg Asp Cys Leu Lys Ala Ile Ser Leu Asn
      305         310         315
Pro Cys His Leu Lys Ala His Phe Arg Leu Ala Arg Cys Leu Phe Glu
      325         330         335
Leu Lys Tyr Val Ala Glu Ala Leu Glu Cys Leu Asp Asp Phe Lys Gly
      340         345         350
Lys Phe Pro Glu Gln Ala His Ser Ser Ala Cys Asp Ala Leu Gly Arg
      355         360         365
Asp Ile Thr Ala Ala Leu Phe Ser Lys Asn Asp Gly Glu Glu Lys Lys
      370         375         380
Gly Pro Gly Gly Gly Ala Pro Val Arg Leu Arg Ser Thr Ser Arg Lys
      385         390         395
Gly Cys Thr Arg

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&lt;210&gt; 2725

&lt;211&gt; 856

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2725

naccggtcca gtgtgccgca ggcacagcac caaccacagc ggccctacct cggccctggc

60

ctgaccccgg cggccctgcc cgccctccc tccagcatca tggccagccc aagaaccagg

120

aaggttctta aagaagtcag ggtgcaggat gagaacaacg tttgttttga gtgtggcgcg  
180  
ttcaatcctc agtgggtcag tgtgacctac ggcacctgga tctgcctgga gtgctcgggg  
240  
agacaccgcy ggcttggggt tcacctcagc tttgtgcgct ctgttactat ggacaagtgg  
300  
aaggacattg agcttgagaa gatgaaagct ggtgggaatg ctaagttccg agagttcctg  
360  
gagttctcagg aggattacga tccttgctgg tccttgccagg agaagtacaa cagcagagcc  
420  
gcggccctct ttagggataa ggtgggtcgt ctggccgaag gcagagagtg gtctctggag  
480  
tcacacctg cccagaactg gacccacact cagcccagga cgctgccgtc catggtgcac  
540  
cggtagctgc tcctcgtagg gccttagtac agtttccact gggctcctgaa cttagtagat  
600  
tgggtttccc acagaattct ccccttcttt gctgttgta cagctctttt cccagaagtc  
660  
agtgggaaaa acagcttttt aaaattgcc aacaataca agcttttagt aaatttgac  
720  
acccatagag ctgtctcaga tagcgcccca ggtaagctcc gcacgccttc caggtgtgca  
780  
cacagccgtg tctgccgtgg cgctgtggga gttcacatct ccattcgtc accgggggtg  
840  
tgtctgccct tcacgc  
856

<210> 2726

<211> 148

<212> PRT

<213> Homo sapiens

<400> 2726

Met	Ala	Ser	Pro	Arg	Thr	Arg	Lys	Val	Leu	Lys	Glu	Val	Arg	Val	Gln
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Asp	Glu	Asn	Asn	Val	Cys	Phe	Glu	Cys	Gly	Ala	Phe	Asn	Pro	Gln	Trp
		20					25				30				
Val	Ser	Val	Thr	Tyr	Gly	Ile	Trp	Ile	Cys	Leu	Glu	Cys	Ser	Gly	Arg
		35				40				45					
His	Arg	Gly	Leu	Gly	Val	His	Leu	Ser	Phe	Val	Arg	Ser	Val	Thr	Met
	50				55				60						
Asp	Lys	Trp	Lys	Asp	Ile	Glu	Leu	Glu	Lys	Met	Lys	Ala	Gly	Gly	Asn
65			70			75			80						
Ala	Lys	Phe	Arg	Glu	Phe	Leu	Glu	Ser	Gln	Glu	Asp	Tyr	Asp	Pro	Cys
		85				90			95						
Trp	Ser	Leu	Gln	Glu	Lys	Tyr	Asn	Ser	Arg	Ala	Ala	Ala	Leu	Phe	Arg
	100				105				110						
Asp	Lys	Val	Val	Ala	Leu	Ala	Glu	Gly	Arg	Glu	Trp	Ser	Leu	Glu	Ser
	115				120				125						
Ser	Pro	Ala	Gln	Asn	Trp	Thr	Pro	Pro	Gln	Pro	Arg	Thr	Leu	Pro	Ser
	130				135				140						
Met	Val	His	Arg												
145															

<210> 2727  
 <211> 1119  
 <212> DNA  
 <213> Homo sapiens

<400> 2727  
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 acaaaaataat caagtacatg gcattaagtt aaatgtctct gcacatgaat ttccacctta  
 120  
 taaatctggg atattaaatt gtgctgtaaa tagatttgta tattttcttt tttgagtact  
 180  
 atgatagggt aaatgggtatg actataaaaa ggatttggtt cttttgtct cctggaatga  
 240  
 catgatgcct ttctagagaa agaaaaattg caggctacag gaaaatgata aaaactactg  
 300  
 gattcattta gactattcga tttaggaagg tacaaccact tctttaacat caagctaaaa  
 360  
 gtgggggaaa gtctcagtct cccaggtagg tctcctctca cactgtcctg ggtggcaggc  
 420  
 gctgtttata catgcccgt atcgctctgg ctgcactgta gatcatctgc cgacgggaca  
 480  
 tcccagtaaa tgccatgtgc caatcagtcc ggctgacatt cagtaaaactc ttttccagga  
 540  
 cttcacccac tgtcaccaaa aggcctgacc acctcagatt atagtcctgg ggagttagac  
 600  
 tttgagcctg ctgtacaaat tccaaaggca ctggtgtggc ttgtgtaaat gtttctagat  
 660  
 gaatgccatg gacaggatct tcaaccacca aacaaccaat gtcaaaccat ttgtcaggca  
 720  
 gcaattctgc aatgaagttt tctactgaca cagctgtctg ttttctatgg atcaccacag  
 780  
 ttcgacgcaa gctatctatc cgttcctgag caccttttaa tccagctgca tagccactg  
 840  
 gttgtggggc aatattggac tgtccagcct cccctacaac cacagctagg ccgaagacct  
 900  
 cctggaaggc atctcggaca gcagccactt tcacttcttt atttgaggtc actacaatat  
 960  
 ccagttcacc tccagatttg atataggagg ccatgccagg gtccagcgtt gtaatcatgc  
 1020  
 tttctactga atgttttgtc ttatcaagca cagacttcac cataggattc ccagccacac  
 1080  
 ccttaataaa accccagatt ccaccagcag atgcttcat  
 1119

<210> 2728  
 <211> 221  
 <212> PRT  
 <213> Homo sapiens

<400> 2728  
 Met Val Lys Ser Val Leu Asp Lys Thr Lys His Ser Val Glu Ser Met  
 1 5 10 15  
 Ile Thr Thr Leu Asp Pro Gly Met Ala Pro Tyr Ile Lys Ser Gly Gly

```

      20      25      30
Glu Leu Asp Ile Val Val Thr Ser Asn Lys Glu Val Lys Val Ala Ala
  35      40      45
Val Arg Asp Ala Phe Gln Glu Val Phe Gly Leu Ala Val Val Val Gly
  50      55      60
Glu Ala Gly Gln Ser Asn Ile Ala Pro Gln Pro Val Gly Tyr Ala Ala
  65      70      75      80
Gly Leu Lys Gly Ala Gln Glu Arg Ile Asp Ser Leu Arg Arg Thr Gly
      85      90      95
Val Ile His Glu Lys Gln Thr Ala Val Ser Val Glu Asn Phe Ile Ala
      100      105      110
Glu Leu Leu Pro Asp Lys Trp Phe Asp Ile Gly Cys Leu Val Val Glu
      115      120      125
Asp Pro Val His Gly Ile His Leu Glu Thr Phe Thr Gln Ala Thr Pro
      130      135      140
Val Pro Leu Glu Phe Val Gln Gln Ala Gln Ser Leu Thr Pro Gln Asp
      145      150      155      160
Tyr Asn Leu Arg Trp Ser Gly Leu Leu Val Thr Val Gly Glu Val Leu
      165      170      175
Glu Lys Ser Leu Leu Asn Val Ser Arg Thr Asp Trp His Met Ala Phe
      180      185      190
Thr Gly Met Ser Arg Arg Gln Met Ile Tyr Ser Ala Ala Arg Ala Ile
      195      200      205
Ala Gly Met Tyr Lys Gln Arg Leu Pro Pro Arg Thr Val
      210      215      220

```

&lt;210&gt; 2729

&lt;211&gt; 393

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2729

```

nnggtggcac ggatcgtagg agccaaatgt ttgttttcct tcttatccct tcgagaccaa
60
atgcagcccc agcagtgggtg aggcactact ttcttgaaga gttgtgcatc catgtaggtc
120
agctgctctg ccacgagatc ttctgagaag cacgtgaatt ctgctgactc tccaccctcc
180
agttcctctt cctcttccat actaagggcc tggtttgacc agtgtgcaga agacttccga
240
gagccccctc acttccccctg cttacagaaa ctgctggatt atctcacacg gatgatgccg
300
ggctctgacc cagaaagaag agcacaaaat cttcttgagc agtttcagaa gcaagaagtg
360
gaaactgaca atgggcttcc caacacgac tcc
393

```

&lt;210&gt; 2730

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2730

```

Val Ser Cys Ser Ala Thr Arg Ser Ser Glu Lys His Val Asn Ser Ala

```



```

      1           5           10           15
Asp Ser Pro Pro Ser Ser Ser Ser Ser Ile Leu Arg Ala Trp
      20           25           30
Leu Asp Gln Cys Ala Glu Asp Phe Arg Glu Pro Pro His Phe Pro Cys
      35           40           45
Leu Gln Lys Leu Leu Asp Tyr Leu Thr Arg Met Met Pro Gly Ser Asp
      50           55           60
Pro Glu Arg Arg Ala Gln Asn Leu Leu Glu Gln Phe Gln Lys Gln Glu
      65           70           75           80
Val Glu Thr Asp Asn Gly Leu Pro Asn Thr Ile Ser
      85           90

```

&lt;210&gt; 2731

&lt;211&gt; 447

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2731

```

necgctccga cctgaaagca cgtccacctc tgcggctcct acctgggtgc aatcgagtta
60
aatggctgat aagcagatca gcctgccagc caagctcatc aatggcggca tcgcggtctg
120
atcgggtgca cctgcgtgtt tcccatcgac ctggccaaga ccaggctgca gaaccagcag
180
aacggccagc gcgtgtacac gagcatgtcc gactgcctca tcaagaccgt ccgctccgag
240
ggctacttcg gcatgtaccg gggagctgct gtgaacttga cctcgtcac ccccagagaag
300
gccatcaagc tggcagccaa cgacttcttc cgacatcagc tctctaagga cgggcagaag
360
ctgaccctgc ttaaagagat gctggcgggc tgtggggctg gcacctgcca ggtgatcgtg
420
accacgccca tggagatgct gaagatc
447

```

&lt;210&gt; 2732

&lt;211&gt; 125

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2732

```

Ala Asp Gln Pro Ala Ser Gln Ala His Gln Trp Arg His Arg Gly Leu
      1           5           10           15
Ile Gly Val Thr Cys Val Phe Pro Ile Asp Leu Ala Lys Thr Arg Leu
      20           25           30
Gln Asn Gln Gln Asn Gly Gln Arg Val Tyr Thr Ser Met Ser Asp Cys
      35           40           45
Leu Ile Lys Thr Val Arg Ser Glu Gly Tyr Phe Gly Met Tyr Arg Gly
      50           55           60
Ala Ala Val Asn Leu Thr Leu Val Thr Pro Glu Lys Ala Ile Lys Leu
      65           70           75           80
Ala Ala Asn Asp Phe Arg His Gln Leu Ser Lys Asp Gly Gln Lys
      85           90           95
Leu Thr Leu Leu Lys Glu Met Leu Ala Gly Cys Gly Ala Gly Thr Cys

```

	100		105		110
Gln	Val	Ile	Val	Thr	Thr
			Pro	Met	Glu
				Met	Leu
				Lys	Ile
	115		120		125

<210> 2733  
 <211> 3619  
 <212> DNA  
 <213> Homo sapiens

<400> 2733  
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 60  
 tcgggcatgg gtatgggggtg ccagaggggt ctggccacct ggggcttgct gtctgagag  
 120  
 ccccgacc catgtcacc ccaacagctg gactgcccgc tggccatgga gcggatcaag  
 180  
 gaggaccggc ccatcaccat caaggacgac aagggaacc tcaaccgctg catcgagac  
 240  
 gtgggtctgc tcttcacac ggatcatggac aagctgccc tggcggagct gacgggtggac  
 300  
 gagttcctag cttcgggctt tgactccgag tccgaatccg agtccgaaaa ttctccacaa  
 360  
 gcggagacac gggaagcacg cgaggctgcc cggagtccgg ataagccggg cgggagcccc  
 420  
 tcggccagcc ggcgtaaaag ccgtgcctct gagcacaag accagctctc tcggctgaag  
 480  
 gacagagacc ccgagttcta caagttcctg caggagaatg accagagcct gctaaacttc  
 540  
 agcgactcgg acagctctga ggaggaagag gggccgttcc actccctgcc agatgtgctg  
 600  
 gaggaagcca gtgaggagga ggatggagcg gaggaaggag aagatgggga cagagtcccc  
 660  
 agagggtga aggggaagaa gaattctgtt cctgtgaccg tcgccatggt tgagagatgg  
 720  
 aagcaggcag caaagcaacg cctcactcca aagctgttcc atgaagtggg acaggcgttc  
 780  
 cgagcagctg tggccaccac ccgaggggac caggaaagtg ctgaggccaa caaattccag  
 840  
 gtacaggaca gtgctgcatt caatgctctg gttaccttct gcatcagaga cctcattggc  
 900  
 tgtctccaga agctgctgtt tggaaagggt gcaaaggata gcagcaggat gctgcagccg  
 960  
 tccagcagcc cgctctgggg gaagcttctg gtggacatca aggttacct gggctcggcc  
 1020  
 atacagctgg tgtctgtct gtccggagacg acgggtgttg cggccgtgct gcggcacatc  
 1080  
 agcgtgctgg tgcctgctt cctgaccttc cccaagcagt gccgatgct gctcaagaga  
 1140  
 atgggtggctg tatggagcac tggggaggag tctctgcggg tgetggcttt cctggtcctc  
 1200  
 agcagagtct gccggcacia gaaggacact ttccttggcc ccgtcctcaa gcaaatgtac  
 1260  
 atcacgtatg tgaggaactg caagttcacc tcgctgggtg cctccctt catcagtttc  
 1320

atgcagtgga ccttgacgga gctgctggcc ctggagccgg gtgtggccta ccagcacgcc  
1380  
ttcctctaca tccgccagct cgccatacac ctgcgcaacg ccatgaccac ccgcaagaag  
1440  
gaaacatacc agtctgtgta caactggcag tatgtgcact gcctcttcct gtggtgccgg  
1500  
gtcctgagca ctgcggggcc cagcgaagcc ctccagccct tgggtctacce ccttgcccaa  
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<210> 2734

<211> 790

<212> PRT

<213> Homo sapiens

<400> 2734

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			20					25					30		
Val	Met	Asp	Lys	Leu	Arg	Leu	Ala	Glu	Leu	Thr	Val	Asp	Glu	Phe	Leu
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Ala	Ser	Gly	Phe	Asp	Ser	Glu	Ser	Glu	Ser	Glu	Ser	Glu	Asn	Ser	Pro
	50					55				60					
Gln	Ala	Glu	Thr	Arg	Glu	Ala	Arg	Glu	Ala	Ala	Arg	Ser	Pro	Asp	Lys
	65				70				75				80		
Pro	Gly	Gly	Ser	Pro	Ser	Ala	Ser	Arg	Arg	Lys	Gly	Arg	Ala	Ser	Glu
			85					90					95		
His	Lys	Asp	Gln	Leu	Ser	Arg	Leu	Lys	Asp	Arg	Asp	Pro	Glu	Phe	Tyr
			100				105					110			
Lys	Phe	Leu	Gln	Glu	Asn	Asp	Gln	Ser	Leu	Leu	Asn	Phe	Ser	Asp	Ser
			115				120					125			
Asp	Ser	Ser	Glu	Glu	Glu	Glu	Gly	Pro	Phe	His	Ser	Leu	Pro	Asp	Val
	130					135					140				
Leu	Glu	Glu	Ala	Ser	Glu	Glu	Glu	Asp	Gly	Ala	Glu	Glu	Gly	Glu	Asp
	145				150					155				160	
Gly	Asp	Arg	Val	Pro	Arg	Gly	Leu	Lys	Gly	Lys	Lys	Asn	Ser	Val	Pro
			165				170						175		
Val	Thr	Val	Ala	Met	Val	Glu	Arg	Trp	Lys	Gln	Ala	Ala	Lys	Gln	Arg

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180      185      190
Leu Thr Pro Lys Leu Phe His Glu Val Val Gln Ala Phe Arg Ala Ala
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210      215      220
Gln Val Thr Asp Ser Ala Phe Asn Ala Leu Val Thr Phe Cys Ile
225      230      235      240
Arg Asp Leu Ile Gly Cys Leu Gln Lys Leu Leu Phe Gly Lys Val Ala
245      250      255
Lys Asp Ser Ser Arg Met Leu Gln Pro Ser Ser Ser Pro Leu Trp Gly
260      265      270
Lys Leu Arg Val Asp Ile Lys Ala Tyr Leu Gly Ser Ala Ile Gln Leu
275      280      285
Val Ser Cys Leu Ser Glu Thr Thr Val Leu Ala Ala Val Leu Arg His
290      295      300
Ile Ser Val Leu Val Pro Cys Phe Leu Thr Phe Pro Lys Gln Cys Arg
305      310      315      320
Met Leu Leu Lys Arg Met Val Val Val Trp Ser Thr Gly Glu Glu Ser
325      330      335
Leu Arg Val Leu Ala Phe Leu Val Leu Ser Arg Val Cys Arg His Lys
340      345      350
Lys Asp Thr Phe Leu Gly Pro Val Leu Lys Gln Met Tyr Ile Thr Tyr
355      360      365
Val Arg Asn Cys Lys Phe Thr Ser Pro Gly Ala Leu Pro Phe Ile Ser
370      375      380
Phe Met Gln Trp Thr Leu Thr Glu Leu Leu Ala Leu Glu Pro Gly Val
385      390      395      400
Ala Tyr Gln His Ala Phe Leu Tyr Ile Arg Gln Leu Ala Ile His Leu
405      410      415
Arg Asn Ala Met Thr Thr Arg Lys Lys Glu Thr Tyr Gln Ser Val Tyr
420      425      430
Asn Trp Gln Tyr Val His Cys Leu Phe Leu Trp Cys Arg Val Leu Ser
435      440      445
Thr Ala Gly Pro Ser Glu Ala Leu Gln Pro Leu Val Tyr Pro Leu Ala
450      455      460
Gln Val Ile Ile Gly Cys Ile Lys Leu Ile Pro Thr Ala Arg Phe Tyr
465      470      475      480
Pro Leu Arg Met His Cys Ile Arg Ala Leu Thr Leu Leu Ser Gly Ser
485      490      495
Ser Gly Ala Phe Ile Pro Val Leu Pro Phe Ile Leu Glu Met Phe Gln
500      505      510
Gln Val Asp Phe Asn Arg Lys Pro Gly Arg Met Ser Ser Lys Pro Ile
515      520      525
Asn Phe Ser Val Ile Leu Lys Leu Ser Asn Val Asn Leu Gln Glu Lys
530      535      540
Ala Tyr Arg Asp Gly Leu Val Glu Gln Leu Tyr Asp Leu Thr Leu Glu
545      550      555      560
Tyr Leu His Ser Gln Ala His Cys Ile Gly Phe Pro Glu Leu Val Leu
565      570      575
Pro Val Val Leu Gln Leu Lys Ser Phe Leu Arg Glu Cys Lys Val Ala
580      585      590
Asn Tyr Cys Arg Gln Val Gln Gln Leu Leu Gly Lys Val Gln Glu Asn
595      600      605
Ser Ala Tyr Ile Cys Ser Arg Arg Gln Arg Val Ser Phe Gly Val Ser

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610                      615                      620  
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 625                      630                      635                      640  
 Thr Pro Leu Thr Leu Tyr Tyr Ser His Trp Arg Lys Leu Arg Asp Arg  
                     645                      650                      655  
 Glu Ile Gln Leu Glu Ile Ser Gly Lys Glu Arg Val Arg Leu Gly Glu  
                     660                      665                      670  
 Gly Thr Trp Leu Glu Asp Leu Asn Phe Pro Glu Ile Lys Arg Arg Lys  
                     675                      680                      685  
 Met Ala Asp Arg Lys Asp Glu Asp Arg Lys Gln Phe Lys Asp Leu Phe  
                     690                      695                      700  
 Asp Leu Asn Ser Ser Glu Glu Asp Asp Thr Glu Gly Phe Leu Glu Arg  
 705                      710                      715                      720  
 Gly Ile Leu Gly Pro Leu Ser Thr Arg His Gly Val Glu Asp Asp Glu  
                     725                      730                      735  
 Glu Asp Glu Glu Glu Gly Glu Glu Asp Ser Ser Asn Ser Glu Gly Glu  
                     740                      745                      750  
 Trp Ser Trp Asp Gly Asp Pro Asp Ala Glu Ala Gly Leu Ala Pro Gly  
                     755                      760                      765  
 Glu Leu Gln Gln Leu Ala Gln Gly Pro Glu Asp Glu Leu Glu Asp Leu  
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<210> 2735

<211> 1666

<212> DNA

<213> Homo sapiens

<400> 2735

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 180  
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 240  
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 720

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1666

&lt;210&gt; 2736

&lt;211&gt; 218

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2736

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Phe His Ser Ser His Ile Ser Thr Ile Gly Val Asp Phe Lys Met Lys  
35 40 45  
Thr Ile Glu Val Asp Gly Ile Lys Val Arg Ile Gln Ile Trp Asp Thr  
50 55 60  
Ala Gly Gln Glu Arg Tyr Gln Thr Ile Thr Lys Gln Tyr Tyr Arg Arg  
65 70 75 80  
Ala Gln Gly Ile Phe Leu Val Tyr Asp Ile Ser Ser Glu Arg Ser Tyr  
85 90 95  
Gln His Ile Met Lys Trp Val Ser Asp Val Asp Glu Tyr Ala Pro Glu  
100 105 110  
Gly Val Gln Lys Ile Leu Ile Gly Asn Lys Ala Asp Glu Glu Gln Lys

115	120	125
Arg Gln Val Gly Arg Glu Gln Gly Gln Gln Lys Cys Pro Ser Leu Gln		
130	135	140
Leu Ala Lys Glu Tyr Gly Met Asp Phe Tyr Glu Thr Ser Ala Cys Thr		
145	150	155
Asn Leu Asn Ile Lys Glu Ser Phe Thr Arg Leu Thr Glu Leu Val Leu		
165	170	175
Gln Ala His Arg Lys Glu Leu Glu Gly Leu Arg Met Arg Ala Ser Asn		
180	185	190
Glu Leu Ala Leu Ala Glu Leu Glu Glu Glu Gly Lys Pro Glu Gly		
195	200	205
Pro Ala Asn Ser Ser Lys Thr Cys Trp Cys		
210	215	

&lt;210&gt; 2737

&lt;211&gt; 898

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2737.

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898

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&lt;210&gt; 2738

&lt;211&gt; 299

&lt;212&gt; PRT



&lt;213&gt; Homo sapiens

&lt;400&gt; 2738

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 20 25 30  
 Ile Val Asp Gln Cys Glu Arg Leu Gln Leu Gln Ser Ala Ala Ile Thr  
 35 40 45  
 Lys Tyr Val Ala Asp Val Leu Pro Gly Lys Asn Gln Arg Ala Val Ser  
 50 55 60  
 Met Ala Ser Ala Ala Arg Glu Leu Val Ile Gln Arg Leu Ser Leu Val  
 65 70 75 80  
 Arg Ser Leu Cys Glu Ser Glu Glu Gln Arg Leu Leu Glu Gln Val His  
 85 90 95  
 Gly Glu Glu Glu Arg Ala His Gln Ser Ile Leu Thr Gln Arg Val His  
 100 105 110  
 Trp Ala Glu Ala Leu Gln Lys Leu Asp Thr Ile Arg Thr Gly Leu Val  
 115 120 125  
 Gly Met Leu Thr His Leu Asp Asp Leu Gln Leu Ile Gln Lys Glu Gln  
 130 135 140  
 Glu Ile Phe Glu Arg Thr Glu Glu Ala Glu Gly Ile Leu Asp Pro Gln  
 145 150 155 160  
 Glu Ser Glu Met Leu Asn Phe Asn Glu Lys Cys Thr Arg Ser Pro Leu  
 165 170 175  
 Leu Thr Gln Leu Trp Ala Thr Ala Val Leu Gly Ser Leu Ser Gly Thr  
 180 185 190  
 Glu Asp Ile Arg Ile Asp Glu Arg Thr Val Ser Pro Phe Leu Gln Leu  
 195 200 205  
 Ser Asp Asp Arg Lys Thr Leu Thr Ser Ala Pro Arg Ser Gln Arg Cys  
 210 215 220  
 Ala Asp Gly Pro Glu Arg Phe Asp His Trp Pro Asn Ala Leu Ala Ala  
 225 230 235 240  
 Thr Ser Phe Gln Asn Gly Leu His Ala Trp Met Val Asn Val Gln Asn  
 245 250 255  
 Ser Cys Ala Tyr Lys Val Gly Val Ala Ser Gly His Leu Pro Arg Lys  
 260 265 270  
 Gly Ser Gly Ser Asp Cys Arg Leu Gly His Asn Ala Phe Ser Trp Val  
 275 280 285  
 Phe Ser Arg Tyr Asp Gln Glu Phe Arg Phe Ser  
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&lt;210&gt; 2739

&lt;211&gt; 1501

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2739

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a  
1501

&lt;210&gt; 2740

&lt;211&gt; 218

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2740

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      20           25           30
Ile Ile Ser Gly Val Val Ser Leu Phe Ile Phe Gly Phe Cys Trp Leu
      35           40           45
Ser Pro Ala Leu Gln Asp Leu Gln Ala Thr Glu Ala Asn Cys Thr Val
      50           55           60
Leu Ser Val Gln Gln Ile Gly Glu Val Phe Glu Cys Thr Phe Thr Cys
      65           70           75           80
Gly Ala Asp Cys Arg Gly Thr Ser Gln Tyr Pro Cys Val Gln Val Tyr
      85           90           95
Val Asn Asn Ser Glu Ser Asn Ser Arg Ala Leu Leu His Ser Asp Glu
      100          105          110
His Gln Leu Leu Thr Asn Pro Lys Cys Ser Tyr Ile Pro Pro Cys Lys
      115          120          125
Arg Glu Asn Gln Lys Asn Leu Glu Ser Val Met Asn Trp Gln Gln Tyr
      130          135          140
Trp Lys Asp Glu Ile Gly Ser Gln Pro Phe Thr Cys Tyr Phe Asn Gln
      145          150          155          160
His Gln Arg Pro Asp Asp Val Leu Leu His Arg Thr His Asp Glu Ile
      165          170          175
Val Leu Leu His Cys Phe Leu Trp Pro Leu Val Thr Phe Val Val Gly
      180          185          190
Val Leu Ile Val Val Leu Thr Ile Cys Ala Lys Ser Leu Ala Val Lys
      195          200          205
Ala Glu Ala Met Lys Lys Arg Lys Phe Ser
      210          215

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&lt;210&gt; 2741

&lt;211&gt; 1487

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2741

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480
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540
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600

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<210> 2742

<211> 163

<212> PRT

<213> Homo sapiens

<400> 2742

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		20						25					30		
Lys	Phe	Ser	Cys	Cys	Gly	Gly	Ile	Ser	Tyr	Lys	Asp	Trp	Ser	Gln	Asn
		35					40					45			
Met	Tyr	Phe	Asn	Cys	Ser	Glu	Asp	Asn	Pro	Ser	Arg	Glu	Arg	Cys	Ser
		50				55					60				
Val	Pro	Tyr	Ser	Cys	Cys	Leu	Pro	Thr	Pro	Asp	Gln	Ala	Val	Ile	Asn
		65				70				75				80	
Thr	Met	Cys	Gly	Gln	Gly	Met	Gln	Ala	Phe	Asp	Tyr	Leu	Glu	Ala	Ser
			85					90					95		
Lys	Val	Ile	Tyr	Thr	Asn	Gly	Cys	Ile	Asp	Lys	Leu	Val	Asn	Trp	Ile
		100					105					110			
His	Ser	Asn	Leu	Phe	Leu	Leu	Gly	Gly	Val	Ala	Leu	Gly	Leu	Ala	Ile
		115					120					125			
Pro	Gln	Leu	Val	Gly	Ile	Leu	Leu	Ser	Gln	Ile	Leu	Val	Asn	Gln	Ile

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<210> 2744  
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 <212> PRT  
 <213> Homo sapiens

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 20                      25                      30  
 Asp Trp Ser Val Pro Ser Pro Pro Thr Ala Ser Gln Asp Ser Gly Val  
 35                      40                      45  
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 65

<210> 2745  
 <211> 769  
 <212> DNA  
 <213> Homo sapiens

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<210> 2746

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2746

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 Ser Gly Glu Lys Leu Pro Asp Gln Pro Phe Thr His His Ser Gln Glu  
 35 40 45  
 Gly Pro Phe Pro Pro Gly Arg Glu Thr Ser Arg Pro Ala Pro His Thr  
 50 55 60  
 Thr Ala Lys Arg Gly Leu Ser His Leu Glu Arg Asn Phe Gln Thr Ser  
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<210> 2747

<211> 1100

<212> DNA

<213> Homo sapiens

<400> 2747

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<210> 2748

<211> 205

<212> PRT

<213> Homo sapiens

<400> 2748

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			20					25					30		
Trp	Thr	Gly	Ala	Phe	Trp	Ile	Pro	Arg	Pro	Pro	Ala	Gly	Ser	Pro	Lys
		35				40					45				
Gly	Cys	Phe	Ala	Cys	Val	Ser	Lys	Pro	Pro	Ala	Leu	Gln	Ala	Pro	Ala
	50				55					60					
Ala	Pro	Ala	Pro	Glu	Pro	Ser	Ala	Ser	Pro	Pro	Met	Ala	Pro	Thr	Leu
	65			70					75				80		
Phe	Pro	Met	Glu	Ser	Lys	Ser	Ser	Lys	Thr	Asp	Ser	Val	Arg	Ala	Ala
			85					90					95		
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<210> 2749
<211> 2050
<212> DNA
<213> Homo sapiens
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1986



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<210> 2750

<211> 332

<212> PRT

<213> Homo sapiens

<400> 2750

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 35 40 45  
 Glu Val Thr Pro Asp Arg Ser Met Ile Ala Ala Val Gln Pro Val  
 50 55 60  
 Ser Leu Gly Tyr Gln His Ile Arg Met Tyr Asp Leu Asn Ser Asn Asn  
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<210> 2751
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1877

&lt;210&gt; 2752

&lt;211&gt; 87

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2752

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 Thr Pro Ala His Ala Pro Thr Xaa Pro Glu Thr Ala Arg Ser Ala Arg  
 20 25 30  
 Thr Ala Pro Arg Ser Ala Ile Thr Arg Arg Ala Phe Thr Ser Thr Arg  
 35 40 45  
 Pro Pro Pro Thr Thr Arg Thr Val Ala Ser Ser Gly Thr His Thr Ser  
 50 55 60  
 Gly Leu Ser Pro Thr Ala Ser Arg Pro Ala Arg Cys Arg Ala Pro Gly  
 65 70 75 80  
 Arg Ser Ser Thr Ile Ile Thr  
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&lt;210&gt; 2753

&lt;211&gt; 2561

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2753

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&lt;210&gt; 2754

&lt;211&gt; 731

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2754

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 20          25          30
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 35          40          45
Cys His Thr Val Val Pro Glu Lys Asp Gly Asp Asn Ile Ile Tyr Gln
 50          55          60
Ala Ser Ser Pro Asp Glu Ala Ala Leu Val Lys Gly Ala Lys Lys Leu
 65          70          75          80
Gly Phe Val Phe Thr Ala Arg Thr Pro Phe Ser Val Ile Ile Glu Ala
 85          90          95
Met Gly Gln Glu Gln Thr Phe Gly Ile Leu Asn Val Leu Glu Phe Ser
100          105          110
Ser Asp Arg Lys Arg Met Ser Val Ile Val Arg Thr Pro Ser Gly Arg
115          120          125
Leu Arg Leu Tyr Cys Lys Gly Ala Asp Asn Val Ile Phe Glu Arg Leu
130          135          140
Ser Lys Asp Ser Lys Tyr Met Glu Glu Thr Leu Cys His Leu Glu Tyr
145          150          155          160
Phe Ala Thr Glu Gly Leu Arg Thr Leu Cys Val Ala Tyr Ala Asp Leu
165          170          175
Ser Glu Gly Asn Glu Tyr Glu Glu Trp Leu Lys Val Tyr Gln Glu Ala
180          185          190
Ser Thr Ile Leu Lys Asp Arg Ala Gln Arg Leu Glu Glu Cys Tyr Glu
195          200          205
Ile Ile Glu Lys Asn Leu Leu Leu Leu Gly Ala Thr Ala Ile Glu Asp
210          215          220
Arg Leu Gln Ala Gly Val Pro Glu Thr Ile Ala Thr Leu Leu Lys Ala
225          230          235          240
Glu Ile Lys Ile Trp Val Leu Thr Gly Asp Lys Gln Glu Thr Ala Ile
245          250          255
Asn Ile Gly Tyr Ser Cys Arg Leu Val Ser Gln Asn Met Ala Leu Ile
260          265          270
Leu Leu Lys Gly Asp Ser Leu Asp Ala Thr Arg Ala Ala Ile Thr Gln
275          280          285
His Cys Thr Asp Leu Gly Asn Leu Leu Gly Lys Glu Asn Asp Val Ala
290          295          300
Leu Ile Ile Asp Gly His Thr Leu Lys Tyr Ala Leu Ser Phe Glu Val
305          310          315          320
Arg Arg Ser Phe Leu Asp Leu Ala Leu Ser Cys Lys Ala Val Ile Cys
325          330          335
Cys Arg Val Ser Pro Leu Gln Lys Ser Glu Ile Val Asp Val Val Lys
340          345          350
Lys Arg Val Lys Ala Ile Thr Leu Ala Ile Gly Asp Gly Ala Asn Asp
355          360          365
Val Gly Met Ile Gln Thr Ala His Val Gly Val Gly Ile Ser Gly Asn
370          375          380
Glu Gly Met Gln Ala Thr Asn Asn Ser Asp Tyr Ala Ile Ala Gln Phe

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385          390          395          400
Ser Tyr Leu Glu Lys Leu Leu Leu Val His Gly Ala Trp Ser Tyr Asn
          405          410          415
Arg Val Thr Lys Cys Ile Leu Tyr Cys Phe Tyr Lys Asn Val Val Leu
          420          425          430
Tyr Ile Ile Glu Leu Trp Phe Ala Phe Val Asn Gly Phe Ser Gly Gln
          435          440          445
Ile Leu Phe Glu Arg Trp Cys Ile Gly Leu Tyr Asn Val Ile Phe Thr
          450          455          460
Ala Leu Pro Pro Phe Thr Leu Gly Ile Phe Glu Arg Ser Cys Thr Gln
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Glu Ser Met Leu Arg Phe Pro Gln Leu Tyr Lys Ile Thr Gln Asn Gly
          485          490          495
Glu Gly Phe Asn Thr Lys Val Phe Trp Gly His Cys Ile Asn Ala Leu
          500          505          510
Val His Ser Leu Ile Leu Phe Trp Phe Pro Met Lys Ala Leu Glu His
          515          520          525
Asp Thr Val Leu Thr Ser Gly His Ala Thr Asp Tyr Leu Phe Val Gly
          530          535          540
Asn Ile Val Tyr Thr Tyr Val Val Val Thr Val Cys Leu Lys Ala Gly
          545          550          555          560
Leu Glu Thr Thr Ala Trp Thr Lys Phe Ser His Leu Ala Val Trp Gly
          565          570          575
Ser Met Leu Thr Trp Leu Val Phe Phe Gly Ile Tyr Ser Thr Ile Trp
          580          585          590
Pro Thr Ile Pro Ile Ala Pro Asp Met Arg Gly Gln Ala Thr Met Val
          595          600          605
Leu Ser Ser Ala His Phe Trp Leu Gly Leu Phe Leu Val Pro Thr Ala
          610          615          620
Cys Leu Ile Glu Asp Val Ala Trp Arg Ala Ala Lys His Thr Cys Lys
          625          630          635          640
Lys Thr Leu Leu Glu Glu Val Gln Glu Leu Glu Thr Lys Ser Arg Val
          645          650          655
Leu Gly Lys Ala Val Leu Arg Asp Ser Asn Gly Lys Arg Leu Asn Glu
          660          665          670
Arg Asp Arg Leu Ile Lys Arg Leu Gly Arg Lys Thr Pro Pro Thr Leu
          675          680          685
Phe Arg Gly Ser Ser Leu Gln Gln Gly Val Pro His Gly Tyr Ala Phe
          690          695          700
Ser Gln Glu Glu His Gly Ala Val Ser Gln Glu Glu Val Ile Arg Ala
          705          710          715          720
Tyr Asp Thr Thr Lys Lys Lys Ser Arg Lys Lys
          725          730

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&lt;210&gt; 2755

&lt;211&gt; 4795

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2755

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120

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180  
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720  
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1740



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&lt;210&gt; 2756

&lt;211&gt; 550

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2756

```

Ile Arg Ser Tyr Arg Asp Val Met Lys Leu Cys Ala Ala His Leu Pro
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Thr Glu Ser Asp Ala Pro Asn His Tyr Gln Ala Val Cys Arg Ala Leu
      20           25           30
Phe Ala Glu Thr Met Glu Leu His Thr Phe Leu Thr Lys Ile Lys Ser
      35           40           45
Ala Lys Glu Asn Leu Lys Lys Ile Gln Glu Met Glu Lys Ser Asp Glu
      50           55           60
Ser Ser Thr Asp Leu Glu Glu Leu Lys Asn Ala Asp Trp Ala Arg Phe
      65           70           75           80
Trp Val Gln Val Met Arg Asp Leu Arg Asn Gly Val Lys Leu Lys Lys
      85           90           95
Val Gln Glu Arg Gln Tyr Asn Pro Leu Pro Ile Glu Tyr Gln Leu Thr
      100           105           110
Pro Tyr Glu Met Leu Met Asp Asp Ile Arg Cys Lys Arg Tyr Thr Leu
      115           120           125
Arg Lys Val Met Val Asn Gly Asp Ile Pro Pro Arg Leu Lys Lys Ser
      130           135           140
Ala His Glu Ile Ile Leu Asp Phe Ile Arg Ser Arg Pro Pro Leu Asn
      145           150           155           160
Pro Val Ser Ala Arg Lys Leu Lys Pro Thr Pro Pro Arg Pro Arg Ser
      165           170           175
Leu His Glu Arg Ile Leu Glu Glu Ile Lys Ala Glu Arg Lys Leu Arg
      180           185           190
Pro Val Ser Pro Glu Glu Ile Arg Arg Ser Arg Leu Asp Val Thr Thr
      195           200           205
Pro Glu Ser Thr Lys Asn Leu Val Glu Ser Ser Met Val Asn Gly Gly
      210           215           220
Leu Thr Ser Gln Thr Lys Glu Asn Gly Leu Ser Thr Ser Gln Gln Val
      225           230           235           240
Pro Ala Gln Arg Lys Lys Leu Leu Arg Ala Pro Thr Leu Ala Glu Leu
      245           250           255
Asp Ser Ser Glu Ser Glu Glu Thr Leu His Lys Ser Thr Ser Ser
      260           265           270
Ser Ser Val Ser Pro Ser Phe Pro Glu Glu Pro Val Leu Glu Ala Val
      275           280           285
Ser Thr Arg Lys Lys Pro Pro Lys Phe Leu Pro Ile Ser Ser Thr Pro
      290           295           300
Gln Pro Glu Arg Arg Gln Pro Pro Gln Arg Arg His Ser Ile Glu Lys
      305           310           315           320
Glu Thr Pro Thr Asn Val Arg Gln Phe Leu Pro Pro Ser Arg Gln Ser
      325           330           335
Ser Arg Ser Leu Glu Glu Phe Cys Tyr Pro Val Glu Cys Leu Ala Leu
      340           345           350
Thr Val Glu Glu Val Met His Ile Arg Gln Val Leu Val Lys Ala Glu
      355           360           365
Leu Glu Lys Tyr Gln Gln Tyr Lys Asp Ile Tyr Thr Ala Leu Lys Lys
      370           375           380
Gly Lys Leu Cys Phe Cys Cys Arg Thr Arg Arg Phe Ser Phe Phe Thr
      385           390           395           400
Trp Ser Tyr Thr Cys Gln Phe Cys Lys Arg Pro Val Cys Ser Gln Cys
      405           410           415
Cys Lys Lys Met Arg Leu Pro Ser Lys Pro Tyr Ser Thr Leu Pro Ile

```

```

      420      425      430
Phe Ser Leu Gly Pro Ser Ala Leu Gln Arg Gly Glu Ser Ser Met Arg
      435      440      445
Ser Glu Lys Pro Ser Thr Ala His His Arg Pro Leu Arg Ser Ile Ala
      450      455      460
Arg Phe Ser Ser Lys Ser Lys Ser Met Asp Lys Ser Asp Glu Glu Leu
      465      470      475      480
Gln Phe Pro Lys Glu Leu Met Glu Asp Trp Ser Thr Met Glu Val Cys
      485      490      495
Val Asp Cys Lys Lys Phe Ile Ser Glu Ile Ile Ser Ser Ser Arg Arg
      500      505      510
Ser Leu Val Leu Ala Asn Lys Arg Ala Arg Leu Lys Arg Lys Thr Gln
      515      520      525
Ser Phe Tyr Met Ser Ser Pro Gly Pro Ser Glu Tyr Cys Pro Ser Glu
      530      535      540
Arg Thr Ile Ser Glu Ile
      545      550

```

&lt;210&gt; 2757

&lt;211&gt; 449

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2757

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120
gggttttaata gttttcagat gcttcaagtg ttgtgaacag agacttgttt ggattatgca
180
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240
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300
acgaccgagt ccatttgggc ttgccttagc tgctcccatg ttgcctgtgg aagatatatt
360
gaagagcatg cactcaagca ctttcaagaa agcagtcacg ctgttgcatg ggaggtgaat
420
gagatgtacg ttttttgta cctttgtga
449

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&lt;210&gt; 2758

&lt;211&gt; 82

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2758

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Met Leu Ala Met Asp Thr Cys Lys His Val Gly Gln Leu Gln Leu Ala
1      5      10      15
Gln Asp His Ser Ser Leu Asn Pro Gln Lys Trp His Cys Val Asp Cys
20     25     30
Asn Thr Thr Glu Ser Ile Trp Ala Cys Leu Ser Cys Ser His Val Ala
35     40     45
Cys Gly Arg Tyr Ile Glu Glu His Ala Leu Lys His Phe Gln Glu Ser

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50                      55                      60  
 Ser His Pro Val Ala Leu Glu Val Asn Glu Met Tyr Val Phe Cys Tyr  
 65                      70                      75                      80  
 Leu Cys

<210> 2759  
 <211> 688  
 <212> DNA  
 <213> Homo sapiens

<400> 2759  
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 120  
 aaccgcccct acttcacgcg gagacggcag caggcccctg gccccagca ggcccctggc  
 180  
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<210> 2760  
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 <212> PRT  
 <213> Homo sapiens

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 20                      25                      30  
 Arg Pro Glu Pro Gln Arg Pro Arg Asn Arg Pro Tyr Phe Gln Arg Arg  
 35                      40                      45  
 Arg Gln Gln Ala Pro Gly Pro Gln Gln Ala Pro Gly Pro Arg Gln Pro  
 50                      55                      60  
 Ala Ala Pro Glu Thr Ser Ala Pro Val Asn Ser Gly Asp Pro Thr Thr  
 65                      70                      75                      80  
 Thr Ile Leu Glu

<210> 2761  
 <211> 922  
 <212> DNA  
 <213> Homo sapiens

<400> 2761  
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 cccataactg agggcaataa agagccagat aagacctggg tgaaaaaggg agagcccctc  
 180  
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<210> 2762  
 <211> 307  
 <212> PRT  
 <213> Homo sapiens

<400> 2762  
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 Ser Ser Leu Ser Gln Ala Gly Asp Pro Ile Thr Glu Gly Asn Lys Glu  
 35 40 45  
 Pro Asp Lys Thr Trp Val Lys Lys Gly Glu Pro Leu Pro Val Lys Leu

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      50              55              60
Asn Ser Ser Thr Glu Ala Asn Val Ile Lys Glu Ala Leu Asp Ser Ser
65              70              75              80
Leu Glu Ser Thr Leu Asp Asn Ser Cys Gln Gly Ala Gln Met Asp Asn
      85              90              95
Lys Ser Glu Val Gln Leu Trp Leu Leu Lys Arg Ile Gln Val Pro Ile
      100              105              110
Glu Asp Ile Leu Pro Ser Lys Glu Glu Lys Ser Lys Thr Pro Pro Met
      115              120              125
Phe Leu Cys Ile Lys Val Gly Lys Pro Met Arg Lys Ser Phe Ala Thr
      130              135              140
His Thr Ala Ala Met Val Gln Gln Tyr Gly Lys Arg Arg Lys Gln Pro
145              150              155              160
Glu Tyr Trp Phe Ala Val Pro Arg Glu Arg Val Asp His Leu Tyr Thr
      165              170              175
Phe Phe Val Gln Trp Ser Pro Asp Val Tyr Gly Lys Asp Ala Lys Glu
      180              185              190
Gln Gly Phe Val Val Glu Lys Glu Glu Leu Asn Met Ile Asp Asn
      195              200              205
Phe Phe Ser Glu Pro Thr Thr Lys Ser Trp Glu Ile Ile Thr Val Glu
210              215              220
Glu Ala Lys Arg Arg Lys Ser Thr Cys Ser Tyr Tyr Glu Asp Glu Asp
225              230              235              240
Glu Glu Val Leu Pro Val Leu Arg Pro Pro Arg Ala Phe Trp Glu Asn
      245              250              255
Lys Pro Leu Asn Arg Trp Ala Arg Pro Phe Pro Ala Arg Val Gln Gly
      260              265              270
Tyr Pro Trp Arg Leu Ala Tyr Ser Thr Leu Glu His Gly Thr Ser Leu
      275              280              285
Lys Thr Leu Tyr Arg Lys Ser Ala Ser Leu Asp Ser Pro Val Leu Leu
      290              295              300
Val Ile Lys
305

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<210> 2763  
 <211> 2210  
 <212> DNA  
 <213> Homo sapiens

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360
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420

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<210> 2764

<211> 423

<212> PRT

<213> Homo sapiens

<400> 2764

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Val	Ala	Ser	Gly	Pro	Val	Val	Gly	Gly	Arg	Lys	Lys	Val	Arg	Gly	Pro
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Glu	Gln	Ile	Lys	Gln	Glu	Val	Glu	Ser	Glu	Glu	Glu	Lys	Pro	Asp	Arg
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Met	Asp	Ile	Asp	Ser	Glu	Asp	Thr	Asp	Ser	Asn	Thr	Ser	Leu	Gln	Thr
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Arg	Ala	Arg	Glu	Lys	Arg	Lys	Pro	Gln	Leu	Glu	Lys	Asp	Thr	Lys	Pro
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Lys	Glu	Pro	Arg	Tyr	Thr	Pro	Val	Ser	Ile	Tyr	Glu	Glu	Lys	Leu	Leu
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Leu	Lys	Arg	Leu	Glu	Ala	Cys	Pro	Gly	Ala	Val	Ala	Met	Thr	Pro	Glu
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Arg	Gly	Leu	Pro	Leu	Phe	Asp	Leu	Asp	Gln	Val	Val	Asn	Ala	Ala	Leu
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Leu	Pro	Ala	Gly	Gln	Ala	Thr	Tyr	Arg	Thr	Thr	Cys	Gln	Asp	Phe	Arg
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His	Gln	Thr	Thr	Lys	Phe	Leu	Tyr	Arg	Leu	Val	Gly	Ser	Glu	Asp	Met
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						230						235		240	
Pro	Tyr	Ile	Arg	Arg	Asp	Tyr	Glu	Thr	Lys	Pro	Pro	Lys	Leu	Gln	Leu
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Leu	Ser	Gln	Ile	Arg	Ser	His	Leu	His	Arg	Ser	Asp	Pro	His	Trp	Thr
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Pro	Glu	Pro	Asp	Ala	Pro	Leu	Asp	Tyr	Cys	Tyr	Val	Arg	Pro	Asn	His
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Ile	Pro	Thr	Ile	Asn	Ser	Met	Cys	Gln	Glu	Phe	Phe	Trp	Pro	Gly	Ile
				290			295					300			
Asp	Leu	Ser	Glu	Cys	Leu	Gln	Tyr	Pro	Asp	Phe	Ser	Val	Val	Val	Leu
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Tyr	Lys	Lys	Val	Ile	Ile	Ala	Phe	Gly	Phe	Met	Val	Pro	Asp	Val	Lys

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          325          330          335
Tyr Asn Glu Ala Tyr Ile Ser Phe Leu Phe Val His Pro Glu Trp Arg
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Arg Ala Gly Ile Ala Thr Phe Met Ile Tyr His Leu Ile Gln Thr Cys
          355          360          365
Met Gly Lys Asp Val Thr Leu His Val Ser Ala Ser Asn Pro Ala Met
          370          375          380
Leu Leu Tyr Gln Lys Phe Gly Phe Lys Thr Glu Tyr Val Leu Asp
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Phe Tyr Asp Lys Tyr Tyr Pro Leu Glu Ser Thr Glu Cys Lys His Ala
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Phe Phe Leu Arg Leu Arg Arg
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<210> 2765  
 <211> 582  
 <212> DNA  
 <213> Homo sapiens

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<210> 2766  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

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<400> 2766
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Thr Val Pro Trp Ser Pro Gly Thr Thr Ser Ala Glu Thr Thr Ala Leu
20     25     30
Ala Arg Ser Leu Cys Ser Ala Gly Thr Gln Pro Ala Pro Ser Thr Thr
35     40     45
Ser Leu Pro Ser Trp Arg Ser Ala Ala Pro Leu Ala Trp Pro Leu Gln

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50		55		60
Leu Ser Gly Gln Trp	Trp Ser Ala Gly Ala Cys Phe Leu Asp Leu Pro			
65	70	75	80	
Ser Leu Ala Leu Cys	Trp Pro Gly Asp Ser Gly Asp Ala Glu Trp Pro			
	85	90	95	
Glu Ala Gly Ser				
100				

&lt;210&gt; 2767

&lt;211&gt; 1202

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2767

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1202

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<211> 282  
<212> PRT  
<213> Homo sapiens

<400> 2768  
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35 40 45  
Ser Gln Glu Cys Leu Glu Ser Arg Val Thr Asn Gln Thr Leu Thr Lys  
50 55 60  
Ser Glu Gly Asp Phe Pro Val Pro Arg Val Gly Ser Arg Leu Glu Ser  
65 70 75 80  
Glu Glu Ala Glu Asp Pro Phe Pro Glu Glu Val Phe Pro Ala Val Gln  
85 90 95  
Gly Lys Thr Lys Arg Pro Val Asp Leu Lys Ile Lys Asn Leu Ala Pro  
100 105 110  
Gly Ser Val Leu Pro Arg Ala Leu Val Leu Lys Ala Phe Ser Ser Ser  
115 120 125  
Ser Leu Asp Ala Ser Ser Asp Ser Ser Pro Val Ala Ser Pro Ser Ser  
130 135 140  
Pro Lys Arg Asn Phe Phe Ser Arg His Gln Ser Phe Thr Thr Lys Thr  
145 150 155 160  
Glu Lys Gly Lys Pro Ser Arg Glu Ile Lys Lys His Ser Met Ser Phe  
165 170 175  
Thr Phe Ala Pro His Lys Lys Val Leu Thr Lys Asn Leu Ser Ala Gly  
180 185 190  
Ser Gly Lys Ser Gln Asp Phe Thr Arg Asp His Val Pro Arg Gly Val  
195 200 205  
Arg Lys Glu Ser Gln Leu Ala Gly Arg Ile Val Gln Glu Asn Gly Cys  
210 215 220  
Glu Thr His Asn Gln Thr Ala Arg Gly Phe Cys Leu Arg Pro His Ala  
225 230 235 240  
Leu Ser Val Asp Asp Val Phe Gln Gly Ala Asp Trp Glu Arg Pro Gly  
245 250 255  
Ser Pro Pro Ser Tyr Glu Glu Ala Met Gln Gly Pro Ala Ala Arg Leu  
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Val Ala Ser Gln Gln Phe Gln Phe Leu Ala  
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<210> 2769  
<211> 1286  
<212> DNA  
<213> Homo sapiens

<400> 2769  
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 1286

&lt;210&gt; 2770

&lt;211&gt; 228

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2770

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 20 25 30  
 Asn Arg Ile Arg Val Arg Gln Asp Leu Ala Ser Leu Pro Ala Glu Leu

35 40 45  
 Ile Asn Gln Ile Gly Asn Arg Cys His Pro Lys Leu Tyr Asp Glu Gly  
 50 55 60  
 Asp Pro Ser Glu Lys Leu Glu Leu Val Thr Gly Thr Asn Val Tyr Ile  
 65 70 75 80  
 Thr Arg Ala Gln Leu Met Asn Cys His Val Ser Ala Gly Thr Arg His  
 85 90 95  
 Lys Val Leu Leu Arg Arg Leu Leu Ala Ser Phe Phe Asp Arg Asn Thr  
 100 105 110  
 Leu Ala Asn Ser Cys Gly Thr Gly Ile Arg Ser Ser Thr Asn Asp Pro  
 115 120 125  
 Arg Arg Lys Pro Leu Asp Ser Arg Val Leu His Ala Val Lys Tyr Tyr  
 130 135 140  
 Cys Gln Asn Phe Ala Pro Asn Phe Lys Glu Ser Glu Met Asn Ala Ile  
 145 150 155 160  
 Ala Ala Asp Met Cys Thr Asn Ala Arg Arg Val Val Arg Lys Ser Trp  
 165 170 175  
 Met Pro Lys Val Lys Val Leu Lys Ala Glu Asp Asp Ala Tyr Thr Thr  
 180 185 190  
 Phe Ile Ser Glu Thr Gly Lys Ile Glu Pro Asp Met Met Gly Val Glu  
 195 200 205  
 His Gly Phe Glu Thr Ala Ser His Glu Gly Glu Ala Gly Pro Ile Ala  
 210 215 220  
 Glu Ala Leu Gln  
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&lt;210&gt; 2771

&lt;211&gt; 1668

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2771

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<210> 2772

<211> 258

<212> PRT

<213> Homo sapiens

<400> 2772

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			20					25					30		
Thr	Met	Ser	Thr	Val	Val	Glu	Leu	Asn	Val	Gly	Gly	Glu	Phe	His	Thr
			35				40					45			
Thr	Thr	Leu	Gly	Thr	Leu	Arg	Lys	Phe	Pro	Gly	Ser	Lys	Leu	Ala	Glu
			50			55					60				
Met	Phe	Ser	Ser	Leu	Ala	Lys	Ala	Ser	Thr	Asp	Ala	Glu	Gly	Arg	Phe
65				70					75					80	
Phe	Ile	Asp	Arg	Pro	Ser	Thr	Tyr	Phe	Arg	Pro	Ile	Leu	Asp	Tyr	Leu
			85					90					95		
Arg	Thr	Gly	Gln	Val	Pro	Thr	Gln	His	Ile	Pro	Glu	Val	Tyr	Arg	Glu

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Ala Gln Phe Tyr Glu Ile Lys Pro Leu Val Lys Leu Leu Glu Asp Met		
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Pro Gln Ile Phe Gly Glu Gln Val Ser Arg Lys Gln Phe Leu Leu Gln		
130	135	140
Val Pro Gly Tyr Ser Glu Asn Leu Glu Leu Met Val Arg Leu Ala Arg		
145	150	155
Ala Glu Ala Ile Thr Ala Arg Lys Ser Ser Val Leu Val Cys Leu Val		
165	170	175
Glu Thr Glu Glu Gln Asp Ala Tyr Tyr Ser Glu Val Leu Cys Phe Leu		
180	185	190
Gln Asp Lys Lys Met Phe Lys Ser Val Val Lys Phe Gly Pro Trp Lys		
195	200	205
Ala Val Leu Asp Asn Ser Asp Leu Met His Cys Leu Glu Met Asp Ile		
210	215	220
Lys Ala Gln Gly Tyr Lys Val Phe Ser Lys Phe Tyr Leu Thr Tyr Pro		
225	230	235
Thr Lys Arg Asn Glu Phe His Phe Asn Ile Tyr Ser Phe Thr Phe Thr		
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Trp Trp

<210> 2773  
 <211> 593  
 <212> DNA  
 <213> Homo sapiens

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 593

<210> 2774  
 <211> 157  
 <212> PRT  
 <213> Homo sapiens



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&lt;210&gt; 2778

&lt;211&gt; 1146

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2778

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Pro Ala Thr Met Gln Pro Ile Pro Glu Ala His Ser Leu Tyr Val Thr
      35           40           45
Leu Ile Leu Ser Asp Ser Val Met Asn Ile Phe Lys Asp Arg Asn Phe
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Asp Ser Cys Cys Ile Cys Ala Cys Asn Met Asn Ile Lys Gly Ala Asp
65           70           75           80
Val Gly Leu Tyr Ile Pro Asp Ser Ser Asn Glu Asp Gln Tyr Arg Cys
      85           90           95
Thr Cys Gly Phe Ser Ala Ile Met Asn Arg Lys Leu Gly Tyr Asn Ser
      100          105          110
Gly Leu Phe Leu Glu Asp Glu Leu Asp Ile Phe Gly Lys Asn Ser Asp
      115          120          125
Ile Gly Gln Ala Ala Glu Arg Arg Leu Met Met Cys Gln Ser Thr Phe
      130          135          140
Leu Pro Gln Val Glu Gly Thr Lys Lys Pro Gln Glu Pro Pro Ile Ser
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Leu Leu Leu Leu Leu Gln Asn Gln His Thr Gln Pro Phe Ala Ser Leu
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Asn Phe Leu Asp Tyr Ile Ser Ser Asn Asn Arg Gln Thr Leu Pro Cys
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Val Ser Trp Ser Tyr Asp Arg Val Gln Ala Asp Asn Asn Asp Tyr Trp
      195          200          205
Thr Glu Cys Phe Asn Ala Leu Glu Gln Gly Arg Gln Tyr Val Asp Asn
      210          215          220
Pro Thr Gly Gly Lys Val Asp Glu Ala Leu Val Arg Ser Ala Thr Val
      225          230          235          240
His Ser Trp Pro His Ser Asn Val Leu Asp Ile Ser Met Leu Ser Ser
      245          250          255
Gln Asp Val Val Arg Met Leu Leu Ser Leu Gln Pro Phe Leu Gln Asp
      260          265          270
Ala Ile Gln Lys Lys Arg Thr Gly Arg Thr Trp Glu Asn Ile Gln His
      275          280          285
Val Gln Gly Pro Leu Thr Trp Gln Gln Phe His Lys Met Ala Gly Arg
      290          295          300
Gly Thr Tyr Gly Ser Glu Glu Ser Pro Glu Pro Leu Pro Ile Pro Thr
      305          310          315          320
Leu Leu Val Gly Tyr Asp Lys Asp Phe Leu Thr Ile Ser Pro Phe Ser
      325          330          335
Leu Pro Phe Trp Glu Arg Leu Leu Leu Asp Pro Tyr Gly Gly His Arg
      340          345          350
Asp Val Ala Tyr Ile Val Val Cys Pro Glu Asn Glu Ala Leu Leu Glu
      355          360          365
Gly Ala Lys Thr Phe Phe Arg Asp Leu Ser Ala Val Tyr Glu Met Cys
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Arg Leu Gly Gln His Lys Pro Ile Cys Lys Val Leu Arg Asp Gly Ile

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Ser Arg Leu Lys Leu Tyr Ala Gln Val Cys Arg His His Leu Ala Pro
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Tyr Leu Ala Thr Leu Gln Leu Asp Ser Ser Leu Leu Ile Pro Pro Lys
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Ala Phe Asn Pro Thr Ser Asn Ser Ser Ser Thr Asn Pro Ala Ala Ser
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Ser Ser Ala Ser Gly Ser Ser Val Pro Pro Val Ser Ser Ser Ala Ser
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Ala Pro Gly Ile Ser Gln Ile Ser Thr Thr Ser Ser Ser Gly Phe Ser
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Gly Ser Val Gly Gly Gln Asn Pro Ser Thr Gly Gly Ile Ser Ala Asp
545          550          555          560
Arg Thr Gln Arg Asn Ile Gly Cys Gly Gly Asp Thr Asp Pro Gly Gln
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Ser Ser Ser Gln Pro Ser Gln Asp Gly Gln Glu Ser Val Thr Glu Arg
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Glu Arg Ile Gly Ile Pro Thr Glu Pro Asp Ser Ala Asp Ser His Ala
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His Pro Pro Ala Val Val Ile Tyr Met Val Asp Pro Phe Thr Tyr Ala
          610          615          620
Ala Glu Glu Asp Ser Thr Ser Gly Asn Phe Trp Leu Leu Ser Leu Met
625          630          635          640
Arg Cys Tyr Thr Glu Met Leu Asp Asn Leu Pro Glu His Met Arg Asn
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Ser Phe Ile Leu Gln Ile Val Pro Cys Gln Tyr Met Leu Gln Thr Met
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Lys Asp Glu Gln Val Phe Tyr Ile Gln Tyr Leu Lys Ser Met Ala Phe
          675          680          685
Ser Val Tyr Cys Gln Cys Arg Arg Pro Leu Pro Thr Gln Ile His Ile
          690          695          700
Lys Ser Leu Thr Gly Phe Gly Pro Ala Ala Ser Ile Glu Met Thr Leu
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Lys Asn Pro Glu Arg Pro Ser Pro Ile Gln Leu Tyr Ser Pro Pro Phe
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Gly Glu Ala Ser Gln Lys Tyr Asn Val Leu Phe Val Gly Tyr Cys Leu
          755          760          765
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          770          775          780
Glu Leu Leu Glu Thr Cys Val Val Asn Ile Ala Leu Pro Asn Arg Ser
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 Pro Ser Pro Gly Ser Pro Ser Gly Ile Gly Val Gly Ser His Phe Gln  
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 1090 1095 1100  
 Val Leu Glu Gln Tyr Asn Ala Leu Ser Trp Leu Thr Cys Asn Pro Ala  
 1105 1110 1115 1120  
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 1140 1145

&lt;210&gt; 2779

&lt;211&gt; 2461

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2779

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&lt;210&gt; 2780

&lt;211&gt; 720

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2780

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		20						25					30		
Val	Thr	Gly	Ile	Arg	Arg	Met	Arg	Phe	Lys	Gly	Leu	Ala	Gly	Val	Asp
	35					40					45				
Ser	Ser	Leu	Glu	Val	Val	Ser	Leu	Leu	Pro	Pro	Arg	Ser	Phe	Ser	Leu
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Asn	Ser	Glu	Gly	Ala	Glu	Arg	Met	Ala	Thr	Thr	Gly	Thr	Pro	Thr	Ala
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Asp	Arg	Gly	Asp	Ala	Ala	Ala	Thr	Asp	Asp	Pro	Ala	Ala	Arg	Phe	Gln
		85						90					95		
Val	Gln	Lys	His	Ser	Trp	Asp	Gly	Leu	Arg	Ser	Ile	Ile	His	Gly	Ser
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Arg	Lys	Tyr	Ser	Gly	Leu	Ile	Val	Asn	Lys	Ala	Pro	His	Asp	Phe	Gln
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Phe	Val	Gln	Lys	Thr	Asp	Glu	Ser	Gly	Pro	His	Ser	His	Arg	Leu	Tyr
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Tyr	Leu	Gly	Met	Pro	Tyr	Gly	Ser	Arg	Glu	Asn	Ser	Leu	Leu	Tyr	Ser
145			150						155					160	
Glu	Ile	Pro	Lys	Lys	Val	Arg	Lys	Glu	Ala	Leu	Leu	Leu	Leu	Ser	Trp
		165						170					175		
Lys	Gln	Met	Leu	Asp	His	Phe	Gln	Ala	Thr	Pro	His	His	Gly	Val	Tyr

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Tyr Ser Ser Val Ser Thr Pro Pro Cys Val His Val Tyr Lys Leu Ser		640
	645	650
Gly Pro Asp Asp Asp Pro Leu His Lys Gln Pro Arg Phe Trp Ala Ser		655
	660	665
Met Met Glu Ala Ala Ser Cys Pro Pro Asp Tyr Val Pro Pro Glu Ile		670
	675	680
Phe His Phe His Thr Arg Ser Asp Val Arg Leu Tyr Gly Met Ile Tyr		685
	690	695
Lys Pro His Ala Leu Gln His Ile Thr Lys Lys Ser Thr Val Phe Glu		700
705	710	715
		720

&lt;210&gt; 2781

&lt;211&gt; 1268

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2781

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1020

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<213> Homo sapiens

<400> 2782

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			20					25					30		
Ala	Arg	Thr	Gly	Leu	Arg	Ile	Cys	Asp	Leu	Leu	Ser	Asp	Phe	Asp	Glu
		35					40					45			
Phe	Ser	Ser	Arg	Phe	Lys	Asn	Leu	Ala	His	Gln	His	Gln	Ser	Met	Phe
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Pro	Thr	Leu	Glu	Ile	Asp	Ile	Glu	Gly	Gln	Leu	Lys	Arg	Leu	Lys	Gly
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Phe	Ala	Glu	Arg	Ile	Arg	Pro	Met	Val	Arg	Asp	Gly	Val	Tyr	Phe	Met
			85					90						95	
Tyr	Glu	Ala	Leu	His	Gly	Pro	Pro	Lys	Lys	Ile	Leu	Val	Glu	Gly	Ala
		100						105					110		
Asn	Ala	Ala	Leu	Leu	Asp	Ile	Asp	Phe	Gly	Thr	Tyr	Pro	Phe	Val	Thr
		115					120					125			
Ser	Ser	Asn	Cys	Thr	Val	Gly	Gly	Val	Cys	Thr	Gly	Leu	Gly	Ile	Pro
	130					135					140				
Pro	Gln	Asn	Ile	Gly	Asp	Val	Tyr	Gly	Val	Val	Lys	Ala	Tyr	Thr	Thr
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Arg	Val	Gly	Ile	Gly	Ala	Phe	Pro	Thr	Glu	Gln	Ile	Asn	Glu	Ile	Gly
			165					170						175	
Gly	Leu	Leu	Gln	Thr	Arg	Gly	His	Glu	Trp	Gly	Val	Thr	Thr	Gly	Arg
		180					185					190			
Lys	Arg	Arg	Cys	Gly	Trp	Leu	Asp	Leu	Met	Ile	Leu	Arg	Tyr	Ala	His
	195					200					205				
Met	Val	Asn	Gly	Phe	Thr	Ala	Leu	Ala	Leu	Thr	Lys	Leu	Asp	Ile	Leu
	210					215					220				
Asp	Val	Leu	Gly	Glu	Val	Lys	Val	Gly	Val	Ser	Tyr	Lys	Leu	Asn	Gly
	225				230				235					240	
Lys	Arg	Ile	Pro	Tyr	Phe	Pro	Ala	Asn	Gln	Glu	Met	Leu	Gln	Lys	Val
			245					250						255	
Glu	Val	Glu	Tyr	Glu	Thr	Leu	Pro	Gly	Trp	Lys	Ala	Asp	Thr	Thr	Gly
	260							265					270		
Ala	Arg	Arg	Trp	Glu	Asp	Leu	Pro	Pro	Gln	Ala	Gln	Asn	Tyr	Ile	Arg
	275					280					285				
Phe	Val	Glu	Asn	His	Val	Gly	Val	Ala	Val	Lys	Trp	Val	Gly	Val	Gly

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 1860  
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 1920  
 ttgatgtgct agcataactg ctctagcttc ttgtgtacca tagtactgtg gcttcagatt  
 1980  
 tagtacctat gaacagatgt acaagacatt tattacactt tttaccaaag ggagttacca  
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 2100  
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 2220  
 aacaggattt tgcttaaaat acttggtact tgtcccaaat caaaatatc caaaatctta  
 2280  
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 2340  
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 2376

&lt;210&gt; 2784

&lt;211&gt; 361

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2784

Ala Glu Arg Gln Ile Glu Glu Glu Asn Arg Glu Arg Glu Trp Glu Arg  
 1 5 10 15  
 Glu Val Leu Gly Ile Lys Arg Asp Lys Ser Asp Ser Pro Ala Ile Gln  
 20 25 30  
 Leu Arg Leu Lys Glu Pro Met Asp Val Asp Val Glu Asp Tyr Tyr Pro  
 35 40 45  
 Ala Phe Leu Asp Met Val Arg Ser Leu Leu Asp Gly Asn Ile Asp Ser  
 50 55 60  
 Ser Gln Tyr Glu Asp Ser Leu Arg Glu Met Phe Thr Ile His Ala Tyr  
 65 70 75 80  
 Ile Ala Phe Thr Met Asp Lys Leu Ile Gln Ser Ile Val Arg Gln Leu

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<210> 2785
<211> 492
<212> DNA
<213> Homo sapiens
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180
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240
gttgctgcaa aaggactatc aggcgagcga ggacaaagtg aggcagctgg tgaaggagat
300
cggccggggag atccagcagc tgagcatggc tggctgctac tggctgctg gctccaccgt
360
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492

<210> 2786  
<211> 155  
<212> PRT  
<213> Homo sapiens

<400> 2786  
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Pro Ala Ala Ala Gly Met Ala Asp Gly Val His Leu Leu Gly Phe Ser  
20 25 30  
Asp Glu Ile Leu Leu His Ile Leu Ser His Val Pro Ser Thr Asp Leu  
35 40 45  
Ile Leu Asn Val Arg Arg Thr Cys Arg Lys Leu Ala Ala Leu Cys Leu  
50 55 60  
Asp Lys Ser Leu Ile His Thr Val Leu Leu Gln Lys Asp Tyr Gln Ala  
65 70 75 80  
Ser Glu Asp Lys Val Arg Gln Leu Val Lys Glu Ile Gly Arg Glu Ile  
85 90 95  
Gln Gln Leu Ser Met Ala Gly Cys Tyr Trp Leu Pro Gly Ser Thr Val  
100 105 110  
Glu His Val Ala Arg Cys Pro Gln Pro Gly Glu Gly Glu Pro Leu Gly  
115 120 125  
Leu Pro Pro His Phe Pro Ala Pro Leu Gln Asp Ala Leu Gly Pro Ala  
130 135 140  
Ala Pro Ala Leu Ala Gly His Arg Arg Glu Pro  
145 150 155

<210> 2787  
<211> 299  
<212> DNA  
<213> Homo sapiens

<400> 2787  
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120  
acaatgcaca gacatggcag tatectctcg gtgggaggga gtcaccattt gctctgccct  
180  
gccctctgct ggggtgctctt acaggtgcta ctgcatccag cgcttgaaac aattctgtgg  
240  
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299

<210> 2788  
<211> 95  
<212> PRT

<213> Homo sapiens

<400> 2788

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 20           25           30
Ala Gly His Ala Thr Met His Arg His Gly Ser Ile Leu Leu Val Gly
 35           40           45
Gly Ser His His Leu Leu Cys Pro Ala Leu Cys Trp Val Leu Leu Gln
 50           55           60
Val Leu Leu His Pro Ala Leu Glu Thr Ile Leu Trp Gly Ile Asp Ser
 65           70           75           80
Glu Glu Ile Thr Asp Gly Arg Asp Phe Leu Pro Gln Leu Thr Gln
 85           90           95
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<210> 2789

<211> 492

<212> DNA

<213> Homo sapiens

<400> 2789

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gcgaggccag gctgtgcagt ggggccagca ccagctgcag cttctcctcc agcaggtcca
 180
ccctggactg cagcctctgc attcttcct tcattgcact gtccactcct gcgggcagag
 240
ccaggcgctg ggtcacggcc ggccggctcc ccaccacac cccagggt ccctcctgtc
 300
cccagggaga ggcagagcca gaagactcag gccaggcct ctgccacccc cgtgcctgc
 360
ctggcgctgg ccagaggtct caggctatgc cgcctaagta cgtcggggcg ggtggctctg
 420
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 492
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<210> 2790

<211> 141

<212> PRT

<213> Homo sapiens

<400> 2790

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Arg Lys Ser Ala Arg Ser Gly Ser Arg Cys Gly Arg Ala Ala Gly Arg
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Ser Ala Pro Gly Gly Cys Arg Gly Pro Gly Ala His Ala Pro Val Pro
 20           25           30
Ala Arg Pro Gly Cys Ala Val Gly Pro Ala Pro Ala Ala Ala Ser Pro
 35           40           45
Pro Ala Gly Pro Pro Trp Thr Ala Ala Ser Ala Leu Leu Pro Ser Leu
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50		55		60
His Cys Pro Leu Leu Arg Ala Glu Pro Gly Ala Gly Ser Arg Pro Ala				
65		70		80
Gly Ser Pro Pro Thr Pro Pro Gly Leu Pro Pro Val Pro Arg Glu Arg				
	85		90	95
Gln Ser Gln Lys Thr Gln Ala Gln Ala Ser Ala Thr Pro Ala Ala Cys				
	100		105	110
Leu Ala Leu Ala Arg Gly Leu Arg Leu Cys Arg Leu Ser Thr Ser Gly				
	115		120	125
Arg Val Ala Leu Arg Arg Gly Ser Gly Ser Arg Pro Arg				
	130		135	140

&lt;210&gt; 2791

&lt;211&gt; 1271

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2791

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ccaaattccc atttttcttc caatcacatt taaaatttca atatgttgca ggcagtatgt
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240
tcaaaatatt taaagaagga agaaggtaaa gatctaaaat atgacatgaa aatacccaga
300
gaagtgtgcc taaattagca ttagggtttg agggatccta aggatgacaa aaagggactc
360
ttctattgaa ttcgtggttg atgctcagcg atagtaacia tcctgcctcc cctaaccatc
420
tcctccccct ccagcagctt cacagaacat ggttgatgag gtaacttagg ggatgcacag
480
ggtgtggcca gaagaccctt ttcctatag accactatga gccctgaaag atttatgagg
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600
accataccag atgtagagga ctcaagtcag agaccagatc agggacccca gagacctcct
660
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720
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780
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840
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900
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960
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1080

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 1271

<210> 2792

<211> 123

<212> PRT

<213> Homo sapiens

<400> 2792

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 Gln Gly Pro Gln Arg Pro Pro Pro Glu Gly Leu Leu Pro Arg Pro Pro  
 35 40 45  
 Gly Asp Ser Gly Asn Gln Asp Asp Gly Pro Gln Gln Arg Pro Pro Lys  
 50 55 60  
 Pro Gly Gly His His Arg His Pro Pro Pro Pro Phe Gln Asn Gln  
 65 70 75 80  
 Gln Arg Pro Pro Gln Arg Gly His Arg Gln Leu Ser Leu Pro Arg Phe  
 85 90 95  
 Pro Ser Val Ser Leu Gln Glu Ala Ser Ser Phe Phe Arg Arg Asp Arg  
 100 105 110  
 Pro Ala Arg His Pro Gln Glu Gln Pro Leu Trp  
 115 120

<210> 2793

<211> 847

<212> DNA

<213> Homo sapiens

<400> 2793

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 cggccctgag agctgactct gcagctgagg tagagagaca acgatcagga accctaagaa  
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 gaggcgccag aggagccgcc ttctgcctca gaacggcgtg actcggagaa ttggagcgtt  
 300  
 attcagtata ttaatgtctt attgataatg gcagaacatc caccactact ggatacaact  
 360  
 cagatcttaa gtagtgatat ttctcttttg tctgccccta ttgtaagtgc agatggaaca  
 420  
 caacaggtta ttctggtaca agttaaccga ggagaagcat ttacaataag aagagaagat  
 480



ggacagtttc agtgcattac aggtcctgct caggttccaa tgatgtcccc aaatggttct  
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<210> 2794  
 <211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 2794  
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 20 25 30  
 Gln Val Ile Leu Val Gln Val Asn Pro Gly Glu Ala Phe Thr Ile Arg  
 35 40 45  
 Arg Glu Asp Gly Gln Phe Gln Cys Ile Thr Gly Pro Ala Gln Val Pro  
 50 55 60  
 Met Met Ser Pro Asn Gly Ser Val Pro Pro Ile Tyr Val Pro Pro Gly  
 65 70 75 80  
 Tyr Ala Pro Gln Val Ile Glu Asp Asn Gly Val Arg Arg Val Val Val  
 85 90 95  
 Val Pro Gln Ala Pro Glu Phe His Pro Gly Ser His Thr Val Leu His  
 100 105 110  
 Arg Ser Pro His Pro Pro Leu Pro Gly Phe Ile Pro Val Pro Thr Met  
 115 120 125  
 Met Pro Pro His His Val Ile Cys Thr His Pro  
 130 135

<210> 2795  
 <211> 1022  
 <212> DNA  
 <213> Homo sapiens

<400> 2795  
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gtcataagaa ggtgctgctc cttctcgctg ggcttgctca gagagatgtg ccaggcccca  
 300  
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<210> 2796

<211> 56

<212> PRT

<213> Homo sapiens

<400> 2796

Ala	Ser	Ala	Ala	Cys	Pro	Ser	Arg	Ser	Cys	Trp	Leu	Arg	Ser	Ser	Cys
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Pro	Lys	Val	Ala	Glu	Glu	Gly	Val	Ser	Ser	Met	Ser	Pro	Gly	Ala	Ser
			20					25					30		
Gly	Glu	Glu	Ala	Glu	Val	Leu	Glu	Pro	Arg	Gly	Ser	Ser	Ser	Gly	Cys
			35				40					45			
Ser	Ala	Pro	Leu	Gly	Ala	Val	Val								
	50					55									

<210> 2797

<211> 475

<212> DNA

<213> Homo sapiens

<400> 2797

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ctgaactcca tcagcgagtc ccgcgatgag cgcattgcacc cctacatcga gctggcctgg  
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<210> 2798

<211> 158

<212> PRT

<213> Homo sapiens

<400> 2798

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Val	His	Leu	Phe	Ala	Leu	Leu	Ile	Ser	Thr	Cys	Ile	Leu	Pro	Asn	Val
		20						25					30		
Glu	Ala	Val	Ser	Asn	Ile	His	Asn	Leu	Asn	Ser	Ile	Ser	Glu	Ser	Pro
		35					40					45			
His	Glu	Arg	Met	His	Pro	Tyr	Ile	Glu	Leu	Ala	Trp	Gly	Phe	Ser	Thr
	50					55					60				
Val	Leu	Gly	Ile	Leu	Leu	Phe	Leu	Ala	Glu	Val	Val	Leu	Leu	Cys	Trp
65				70					75					80	
Ile	Lys	Phe	Leu	Pro	Val	Asp	Ala	Arg	Arg	Gln	Pro	Gly	Pro	Pro	Pro
			85					90					95		
Gly	Pro	Gly	Ser	His	Thr	Gly	Trp	Gln	Ala	Ala	Leu	Val	Ser	Thr	Ile
		100					105						110		
Ile	Met	Val	Pro	Val	Gly	Leu	Ile	Phe	Val	Val	Phe	Thr	Ile	His	Phe
		115					120					125			
Tyr	Arg	Ser	Leu	Val	Arg	His	Lys	Thr	Glu	Arg	His	Asn	Arg	Glu	Ile
	130					135					140				
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145				150							155				

<210> 2799

<211> 2872

<212> DNA

<213> Homo sapiens

<400> 2799

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720  
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900  
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 2872

<210> 2800

<211> 294

<212> PRT

<213> Homo sapiens

<400> 2800

Met	Ser	Pro	Phe	Leu	Phe	Cys	Cys	Met	Met	Val	Gly	Gly	Gly	Glu	Asp
1				5				10						15	
Thr	Phe	Met	Ala	Ser	Pro	Tyr	Lys	Pro	Glu	Ile	Ser	Arg	Glu	Gln	Ala
			20				25						30		
Ile	Ala	Leu	Leu	Lys	Asp	Gln	Glu	Pro	Gly	Ala	Phe	Ile	Ile	Arg	Asp
		35			40					45					
Ser	His	Ser	Phe	Arg	Gly	Ala	Tyr	Gly	Leu	Ala	Met	Lys	Val	Ser	Ser
	50				55					60					
Pro	Pro	Pro	Thr	Ile	Met	Gln	Gln	Asn	Lys	Lys	Gly	Asp	Met	Thr	His
65				70					75					80	
Glu	Leu	Val	Arg	His	Phe	Leu	Ile	Glu	Thr	Gly	Pro	Arg	Gly	Val	Lys
			85					90					95		
Leu	Lys	Gly	Cys	Pro	Asn	Glu	Pro	Asn	Phe	Gly	Ser	Leu	Ser	Ala	Leu

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      100      105      110
Val Tyr Gln His Ser Ile Ile Pro Leu Ala Leu Pro Cys Lys Leu Val
      115      120      125
Ile Pro Asn Arg Asp Pro Thr Asp Glu Ser Lys Asp Ser Ser Gly Pro
      130      135      140
Ala Asn Ser Thr Ala Asp Leu Leu Lys Gln Gly Ala Ala Cys Asn Val
      145      150      155      160
Leu Phe Ile Asn Ser Val Asp Met Glu Ser Leu Thr Gly Pro Gln Ala
      165      170      175
Ile Ser Lys Ala Thr Ser Glu Thr Leu Ala Ala Asp Pro Thr Pro Ala
      180      185      190
Ala Thr Ile Val His Phe Lys Val Ser Ala Gln Gly Ile Thr Leu Thr
      195      200      205
Asp Asn Gln Arg Lys Leu Phe Phe Arg Arg His Tyr Pro Leu Asn Thr
      210      215      220
Val Thr Phe Cys Asp Leu Asp Pro Gln Glu Arg Lys Trp Met Lys Thr
      225      230      235      240
Glu Gly Gly Ala Pro Ala Lys Leu Phe Gly Phe Val Ala Arg Lys Gln
      245      250      255
Gly Ser Thr Thr Asp Asn Ala Cys His Leu Phe Ala Glu Leu Asp Pro
      260      265      270
Asn Gln Pro Ala Ser Ala Ile Val Asn Phe Val Ser Lys Val Met Leu
      275      280      285
Asn Ala Gly Gln Lys Arg
      290

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&lt;210&gt; 2801

&lt;211&gt; 549

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2801

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60
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180
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240
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420
cctcccacca ttgtacagga caaagtgtt gctctgatcc aggcattggc tgatgccttt
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gttgaattc
549

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&lt;210&gt; 2802

<211> 151  
 <212> PRT  
 <213> Homo sapiens

<400> 2802  
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 Leu Glu Lys Ala Thr Asp Gly Ser Leu Gln Ser Glu Asp Trp Thr Leu  
 20 25 30  
 Asn Met Glu Ile Cys Asp Ile Ile Asn Glu Thr Glu Glu Gly Pro Lys  
 35 40 45  
 Asp Ala Ile Arg Ala Leu Lys Lys Arg Leu Asn Gly Asn Arg Asn Tyr  
 50 55 60  
 Arg Glu Val Met Leu Ala Leu Thr Val Leu Glu Thr Cys Val Lys Asn  
 65 70 75 80  
 Cys Gly His Arg Phe His Ile Leu Val Ala Asn Arg Asp Phe Ile Asp  
 85 90 95  
 Ser Val Leu Val Lys Ile Ile Ser Pro Lys Asn Asn Pro Pro Thr Ile  
 100 105 110  
 Val Gln Asp Lys Val Leu Ala Leu Ile Gln Ala Trp Ala Asp Ala Phe  
 115 120 125  
 Arg Ser Ser Pro Asp Leu Thr Gly Val Val His Ile Tyr Glu Glu Leu  
 130 135 140  
 Lys Arg Lys Gly Val Glu Phe  
 145 150

<210> 2803  
 <211> 459  
 <212> DNA  
 <213> Homo sapiens

<400> 2803  
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 120  
 ccgccagccg taggggtgtg gctgtccggg ctcacgggga cctgtctcc gagtcgttcg  
 180  
 tgcagcgtgt gtaccagccc ttcctcacca cctgcgacgg gcaccgggccc tgcagcacct  
 240  
 accgcaatat gccagccgcc atgccggaac ggaggaggct gtgtccagcc tggccgctgc  
 300  
 cgctgccctg caggatggcg gggtgacact tgccagtcag atgtggacna gtgcaatgaa  
 360  
 ggaagaagtg cagaggctgc agtccagggt ggacctgctg gaggagaagc tgcagctggt  
 420  
 actggcccca ctgcacagcc tggcctcgca ggcactgga  
 459

<210> 2804  
 <211> 153  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 2804

Xaa Met Ala Thr Pro Gly Leu Gln Gln His Gln Gln Pro Pro Gly Pro  
 1 5 10 15  
 Gly Arg His Arg Trp Pro Pro Pro Gly Gly Ala Ala Pro Ala Pro  
 20 25 30  
 Val Arg Gly Met Thr Asp Ser Pro Pro Pro Ala Val Gly Cys Val Leu  
 35 40 45  
 Ser Gly Leu Thr Gly Thr Leu Ser Pro Ser Arg Ser Cys Ser Val Cys  
 50 55 60  
 Thr Ser Pro Ser Ser Pro Pro Ala Thr Gly Thr Gly Pro Ala Ala Pro  
 65 70 75 80  
 Thr Ala Ile Cys Gln Pro Pro Cys Arg Asn Gly Gly Ser Cys Val Gln  
 85 90 95  
 Pro Gly Arg Cys Arg Cys Pro Ala Gly Trp Arg Gly Asp Thr Cys Gln  
 100 105 110  
 Ser Asp Val Asp Xaa Cys Asn Glu Gly Arg Ser Ala Glu Ala Ala Val  
 115 120 125  
 Gln Gly Gly Pro Ala Gly Gly Glu Ala Ala Ala Gly Thr Gly Pro Thr  
 130 135 140  
 Ala Gln Pro Gly Leu Ala Gly Thr Gly  
 145 150

&lt;210&gt; 2805

&lt;211&gt; 771

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2805

nnaaatttct gtgtggttga gctgctgcct agtgatcctg agtacaacac ggtggcaagc  
 60  
 aagtttaatc agacctgtc acacttcaga atagagaaga ttgagaggat ccagaatcca  
 120  
 gatctcttga atagctacca ggcaaagaaa aaaactatgg atgccaagaa tggccagaca  
 180  
 atgaatgaga agcaactctt ccatgggaca gatgccggt cctgtccaca cgtcaatcga  
 240  
 aatggcttta accgcagcta tgccggaaag aatgctgtgg catatggaaa gggaaacctat  
 300  
 tttgctgtca atgccaatta ttctgccaat gatacgtact ccagaccaga tgcaaatggg  
 360  
 agaaagcatg tgtattatgt gcgagtactt actggaatct atacacatgg aaatcattca  
 420  
 ttaattgtgc ctctttcaaa gaacctcaa aatcctactg acctgtatga cactgtcaca  
 480  
 gataatgtgc accatccaag ttattttgtg gcattttatg actaccaagc ataccagag  
 540  
 taccttatta cgttttagaaa ataacacttt ggtatccttc ccacaaaatt atttccatt  
 600  
 tgtacatatc tagttgtaaa acaagtttta gctttttttt ttaattcttc ttaacagatt  
 660  
 tttctaatac ccaaggatca ttctttgtcg ctgcagtcag atctttcttc agcttctctt  
 720  
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 771



<210> 2806  
 <211> 187  
 <212> PRT  
 <213> Homo sapiens

<400> 2806  
 Xaa Asn Phe Cys Val Val Glu Leu Leu Pro Ser Asp Pro Glu Tyr Asn  
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 Thr Val Ala Ser Lys Phe Asn Gln Thr Cys Ser His Phe Arg Ile Glu  
 20 25 30  
 Lys Ile Glu Arg Ile Gln Asn Pro Asp Leu Trp Asn Ser Tyr Gln Ala  
 35 40 45  
 Lys Lys Lys Thr Met Asp Ala Lys Asn Gly Gln Thr Met Asn Glu Lys  
 50 55 60  
 Gln Leu Phe His Gly Thr Asp Ala Gly Ser Val Pro His Val Asn Arg  
 65 70 75 80  
 Asn Gly Phe Asn Arg Ser Tyr Ala Gly Lys Asn Ala Val Ala Tyr Gly  
 85 90 95  
 Lys Gly Thr Tyr Phe Ala Val Asn Ala Asn Tyr Ser Ala Asn Asp Thr  
 100 105 110  
 Tyr Ser Arg Pro Asp Ala Asn Gly Arg Lys His Val Tyr Tyr Val Arg  
 115 120 125  
 Val Leu Thr Gly Ile Tyr Thr His Gly Asn His Ser Leu Ile Val Pro  
 130 135 140  
 Pro Ser Lys Asn Pro Gln Asn Pro Thr Asp Leu Tyr Asp Thr Val Thr  
 145 150 155 160  
 Asp Asn Val His His Pro Ser Leu Phe Val Ala Phe Tyr Asp Tyr Gln  
 165 170 175  
 Ala Tyr Pro Glu Tyr Leu Ile Thr Phe Arg Lys  
 180 185

<210> 2807  
 <211> 1660  
 <212> DNA  
 <213> Homo sapiens

<400> 2807  
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 120  
 cccaggtgct cagggccgcc tgtgaatgca ggtgccttgt cccaaacaga ggacatatta  
 180  
 atagggccat gatttcctgt tgccacaatt ttgccaaggc aggctggcac cagaacacca  
 240  
 aagaagggaa attatagtgg agtagcagtt tgtgaatctg gagtccttgg ttcaatcaca  
 300  
 gaacaagtag ggagaggagc caggacctag gccttcaggt tttcagcaag gaaggactct  
 360  
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 420  
 ctctgactct cggatagaaa ggcaggacaa tcggagcctg gggttcacgt gagtccaggaa  
 480

agggagctct ccacactgga atcgctgtag ccgaggaggt tctaattgga cgatcttcga  
 540  
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 600  
 aagtgtccag aggaacatgg tcatgggctc gtcaaccctg gctgaagact caagtgggc  
 660  
 tccaggccct gcaaactgca agaccactct gcctggcact tggacgaaat ctaggaggga  
 720  
 ggcccactct ctaggacaca gccctagtgc tgctgccaca tggtgattcc tacaggtcac  
 780  
 cacggcttcg gcagtcctcat cctccaccag gagcctgatg atggcctggc ttatagctgt  
 840  
 ctgcgtaggg caagtggagc ccaggcgagt gcactttccc tgccggcaga tgctgggtaca  
 900  
 ataagcacac acccagaaga gctgaaggct gaagacagag acgatatggc aagaggcagt  
 960  
 ggccctggaat ggggactgac caccctgcag aagttcagcc aggtagatgt ggggcagggg  
 1020  
 aacgctgatg gtggtctcag ggggaaaact caggacctgc acataagtgg atgaccggaa  
 1080  
 acaacaataa acattgtgag atctggaaac ccttttctcc aactggctga agtggaccg  
 1140  
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 1200  
 gtgagggggg aattcacatt cagcagtctc aagagcgact gttagcttca cacaccttct  
 1260  
 catggccccc gtgttcccca gtttcatcca gagagacgcc acaaggggtt cacatagtgt  
 1320  
 ccgtgacaaa atctcagcgg agaaagacac caaggaatct gtgaaattgt cactgagcag  
 1380  
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 1440  
 ggagctttca agctccagag tccagttgtc ctggacagtg aggcaggatg cacaaccagc  
 1500  
 caactccaga ggacgccgag atatgcagga tgaaccatcc ttttcaaaca acattggtgt  
 1560  
 agcggggcca ggagctacga gtcggtacac ctgtcccggg tgcaagaact caaaccagcg  
 1620  
 gactgaagag ccaaagaaaa tgagggaac cctctgatca  
 1660

&lt;210&gt; 2808

&lt;211&gt; 390

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2808

Met Leu Phe Glu Lys Asp Gly Ser Ser Cys Ile Ser Arg Arg Pro Leu  
 1 5 10 15  
 Glu Leu Ala Gly Cys Ala Ser Cys Leu Thr Val Gln Asp Asn Trp Thr  
 20 25 30  
 Leu Glu Leu Glu Ser Ser Gln Asp Ile Gln Asp Val Leu Asp Ala Asn  
 35 40 45  
 Lys Ser Leu Pro Glu Ser Ser Leu Thr Asp Leu Leu Ser Asp Asn Phe

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      50      55      60
Thr Asp Ser Leu Val Ser Phe Ser Ala Glu Ile Leu Ser Arg Thr Leu
65      70      75      80
Cys Glu Pro Leu Val Ala Ser Leu Trp Met Lys Leu Gly Asn Thr Gly
      85      90      95
Ala Met Arg Arg Cys Val Lys Leu Thr Val Ala Leu Glu Thr Ala Glu
      100      105      110
Cys Glu Phe Pro Pro His Leu Asp Val Tyr Ile Glu Asp Pro His Leu
      115      120      125
Pro Pro Ser Leu Gly Leu Leu Pro Gly Ala Arg Val His Phe Ser Gln
      130      135      140
Leu Glu Lys Arg Val Ser Arg Ser His Asn Val Tyr Cys Cys Phe Arg
145      150      155      160
Ser Ser Thr Tyr Val Gln Val Leu Ser Phe Pro Pro Glu Thr Thr Ile
      165      170      175
Ser Val Pro Leu Pro His Ile Tyr Leu Ala Glu Leu Leu Gln Gly Gly
      180      185      190
Gln Ser Pro Phe Gln Ala Thr Ala Ser Cys His Ile Val Ser Val Phe
      195      200      205
Ser Leu Gln Leu Phe Trp Val Cys Ala Tyr Cys Thr Ser Ile Cys Arg
      210      215      220
Gln Gly Lys Cys Thr Arg Leu Gly Ser Thr Cys Pro Thr Gln Thr Ala
225      230      235      240
Ile Ser Gln Ala Ile Ile Arg Leu Leu Val Glu Asp Gly Thr Ala Glu
      245      250      255
Ala Val Val Thr Cys Arg Asn His His Val Ala Ala Leu Gly Leu
      260      265      270
Cys Pro Arg Glu Trp Ala Ser Leu Leu Asp Phe Val Gln Val Pro Gly
      275      280      285
Arg Val Val Leu Gln Phe Ala Gly Pro Gly Ala Gln Leu Glu Ser Ser
      290      295      300
Ala Arg Val Asp Glu Pro Met Thr Met Phe Leu Trp Thr Leu Cys Thr
305      310      315      320
Ser Pro Ser Val Leu Arg Pro Ile Val Leu Ser Phe Glu Leu Glu Arg
      325      330      335
Lys Pro Ser Lys Ile Val Pro Leu Glu Pro Pro Arg Leu Gln Arg Phe
      340      345      350
Gln Cys Gly Glu Leu Pro Phe Leu Thr His Val Asn Pro Arg Leu Arg
      355      360      365
Leu Ser Cys Leu Ser Ile Arg Glu Ser Glu Tyr Ser Ser Ser Leu Gly
      370      375      380
Ile Leu Ala Ser Ser Cys
385      390

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<210> 2809
<211> 1502
<212> DNA
<213> Homo sapiens

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<400> 2809
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ggccccctc tgagggggct ctagtgcctg accctgatct gtcctcattc gacagctgaa
120

```

actgttaagc gctggcccag tccccccacc ccaccagcc gtgtactgcc tgggtcccc  
180  
tcaaagggaa atttttacgg aaacatcttg gcagcaagtg gaaaaagatc tatggcccat  
240  
gaaccaactg aaaactccaa gaacctctg tctgcctctg ccagcagcga gtcctaagcg  
300  
cagaatccag agctcgtagc tgtcctcagc tgtaactact gtttcagaat gttgctgctg  
360  
catacatttg tcatgtcagc cagccagctc cgtgggtgag agtgtgctg tgcgctgtc  
420  
tgtgtgtgtg tgcgtctgtg tgtgctgtc tgtgtgtgtg cacgtctgtg cgtctgtgtg  
480  
tgcgctctg tgtgcgctg tgtctgtgcg tgtgtgcgtc tgtgtgtgcg tctgtgcgcg  
540  
tgtgtgtgcg cgtctgtgtg tatgtgtgca cgcgcncg cgtgtgtgtg cacgtgcgtg  
600  
nntctctgca cgcgtgtctg tgatatgtg cacgcgtgtg tctgtgtgtg tgcacgcg  
660  
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720  
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780  
atcgcaagca ttcagactgg acgaccggct cgtattccga tcagtcgctt ccattgttag  
840  
catcgtacac gattgtgatt tttatgtcaa aagaagccaa aacttgcaat actattttta  
900  
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960  
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1140  
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1260  
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1380  
acaaacaaaa ggatgtgatc attaatgtta aagcgctttg taaaattcac atttacaaaa  
1440  
taataaagtc agttcaaacc taataaaaaa aaaaaaaa aaaaaaaa aaaaaaaa  
1500  
aa  
1502

&lt;210&gt; 2810

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2810

Glu Cys Ala Cys Ala Arg Val Cys Val Cys Val Arg Leu Cys Val Arg  
 1 5 10 15  
 Val Cys Val Cys Ala Arg Leu Cys Val Cys Val Cys Ala Ser Val Cys  
 20 25 30  
 Ala Cys Val Cys Ala Cys Val Arg Leu Cys Val Arg Leu Cys Ala Cys  
 35 40 45  
 Val Cys Ala Ser Val Cys Met Cys Ala Arg Ala Xaa Val Cys Val Cys  
 50 55 60  
 Thr Cys Val Xaa Leu Cys Thr Arg Val Cys Val Cys Val His Ala Cys  
 65 70 75 80  
 Val Cys Val Cys Ala Arg Ala Cys Thr Ser Pro Pro Glu His Leu Gly  
 85 90 95  
 Phe Gly Thr Arg Trp Phe  
 100

&lt;210&gt; 2811

&lt;211&gt; 591

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2811

nmacgcgtgt aggttgggtg cacttacaag taagtataaa ctgctcttca attcaagttt  
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 attaatgctg cccccccca gggttttaat ccggtctggg cagaagcggg cgataaaagc  
 120  
 caaaggagac cataaagtgt aggatatctt ctggttagtg gctgccgggt aatcacgatg  
 180  
 catccatctt cctcggcgct gcagccctca gtagccagaa ggcagtctcc ttccttgggg  
 240  
 ggcaaaagcc ccgagcccg cctgcccngt tgccccgctc ccgcggtgga tgaacctcaa  
 300  
 cccnnttccc aggetctctc tggccccagg gtcccaggac ccccgagacc ctgggggtgcg  
 360  
 gcgccactga ggcccagacc gggggaagga gaccctgtca ctcgggagcg gagccctgtc  
 420  
 ccgggagcga cggaaatgcc tcctccacgc cccaaggttc ctgctccgcc aggcccaacc  
 480  
 ggaaggagtc ctcgggccgc agtggggcac caccgggccc ccggccctcc aggctgcgtg  
 540  
 gggccttctc tcagtgggca actggggagc tagcccgggg cggccgcaag c  
 591

&lt;210&gt; 2812

&lt;211&gt; 131

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2812

Met His Pro Ser Ser Ala Ser Gln Pro Ser Val Ala Arg Arg Gln  
 1 5 10 15  
 Ser Pro Ser Leu Gly Gly Lys Ser Pro Glu Pro Ser Leu Pro Xaa Cys  
 20 25 30  
 Pro Ala Pro Ala Val Asp Glu Pro Gln Pro Xaa Ser Gln Ala Pro Pro

35	40	45
Gly Pro Arg Val Pro Gly	Pro Pro Arg Pro Trp	Gly Ala Ala Pro Leu
50	55	60
Arg Pro Arg Pro Gly Glu	Gly Asp Pro Val Thr	Arg Glu Arg Ser Pro
65	70	75
Val Pro Gly Ala Thr Glu	Met Pro Pro Pro Arg	Pro Lys Val Pro Ala
85	90	95
Pro Pro Gly Pro Thr Gly	Arg Ser Pro Arg Ala	Ala Val Gly His His
100	105	110
Arg Ala Ala Gly Pro Pro	Gly Cys Val Gly Pro	Ser Leu Ser Gly Gln
115	120	125
Leu Gly Ser		
130		

&lt;210&gt; 2813

&lt;211&gt; 2417

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2813

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120
tgctgcagtt cagtgttgct ccagatttta tgcttgctgt tagattttctc tgttctctaa
180
tttgtaagt ttgtctttta ttttccacag gctttcttga tcatggatgg tgaagatata
240
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300
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360
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420
gctgataacc aaagactgaa atatgaagtg gaggcattaa aggagaagct agagcatcaa
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540
attaaggagc agttgcataa gtatgtgaga gagctggagc aggccaacga cgacctggag
600
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660
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720
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780
caggaagtaa ctagaaagtc ggctcctagc tctccaactc tagactgtga aaagatggac
840
tcgcccgtcc aagcatcact ttctttgcca gctacccctg ttggcaaagg aacggagaa
900
acttttctt caccgaaagc tataccaaat ggttttggta ccagtccact aactccctct
960
gctaggatat cagcactaaa catcgtgggg gatctcttac ggaaagtagg ggcttttaga
1020

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tccaaattag cagcttgag gaattttgca aaggaccaag catcacgaaa atcctatatt  
1080  
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1140  
catacatctt tcttcgacaa aggggcagta aacggctttg acccgctcc tcctcctcct  
1200  
ggtctgggct cctcgcgtcc atcgtcagcg cgggtatgt gcctctcagt gtgtgagtgc  
1260  
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1680  
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1740  
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1860  
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1920  
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1980  
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2100  
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2160  
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2220  
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2280  
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2340  
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2400  
aaaaaaaaaa aaaaaaa  
2417

&lt;210&gt; 2814

&lt;211&gt; 471

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2814

```

Phe Val Lys Phe Val Phe Asn Ile Ser Gln Ala Phe Leu Ile Met Asp
 1           5           10           15
Gly Glu Asp Ile Pro Asp Phe Ser Ser Leu Lys Glu Glu Thr Ala Tyr
 20           25           30
Trp Lys Glu Leu Ser Leu Lys Tyr Lys Gln Ser Phe Gln Glu Ala Arg
 35           40           45
Asp Glu Leu Val Glu Phe Gln Glu Gly Ser Arg Glu Leu Glu Ala Glu
 50           55           60
Leu Glu Ala Gln Leu Val Gln Ala Glu Gln Arg Asn Arg Asp Leu Gln
 65           70           75           80
Ala Asp Asn Gln Arg Leu Lys Tyr Glu Val Glu Ala Leu Lys Glu Lys
 85           90           95
Leu Glu His Gln Tyr Ala Gln Ser Tyr Lys Gln Val Ser Val Leu Glu
100           105           110
Asp Asp Leu Ser Gln Thr Arg Ala Ile Lys Glu Gln Leu His Lys Tyr
115           120           125
Val Arg Glu Leu Glu Gln Ala Asn Asp Asp Leu Glu Arg Ala Lys Arg
130           135           140
Ala Thr Ile Val Ser Leu Glu Thr Leu Asn Lys Leu Asn Gln Ala Ile
145           150           155           160
Glu Arg Asn Ala Phe Leu Glu Ser Glu Leu Asp Glu Lys Glu Ser Leu
165           170           175
Leu Val Ser Val Gln Arg Leu Lys Asp Glu Ala Arg Asp Leu Arg Gln
180           185           190
Glu Leu Ala Val Arg Glu Arg Gln Gln Glu Val Thr Arg Lys Ser Ala
195           200           205
Pro Ser Ser Pro Thr Leu Asp Cys Glu Lys Met Asp Ser Ala Val Gln
210           215           220
Ala Ser Leu Ser Leu Pro Ala Thr Pro Val Gly Lys Gly Thr Glu Asn
225           230           235           240
Thr Phe Pro Ser Pro Lys Ala Ile Pro Asn Gly Phe Gly Thr Ser Pro
245           250           255
Leu Thr Pro Ser Ala Arg Ile Ser Ala Leu Asn Ile Val Gly Asp Leu
260           265           270
Leu Arg Lys Val Gly Ala Leu Glu Ser Lys Leu Ala Ala Cys Arg Asn
275           280           285
Phe Ala Lys Asp Gln Ala Ser Arg Lys Ser Tyr Ile Ser Gly Asn Val
290           295           300
Asn Cys Gly Val Leu Asn Gly Asn Gly Thr Lys Phe Ser Arg Ser Gly
305           310           315           320
His Thr Ser Phe Phe Asp Lys Gly Ala Val Asn Gly Phe Asp Pro Ala
325           330           335
Pro Pro Pro Pro Gly Leu Gly Ser Ser Arg Pro Ser Ser Ala Pro Gly
340           345           350
Met Cys Leu Ser Val Cys Glu Cys Leu Ala Ser Arg Gly Ala Pro Ala
355           360           365
Leu Leu Gln Gln Pro Arg Thr Pro Thr Pro His Pro Ser Val Pro Gly
370           375           380
Pro Ser Pro Val Pro Leu Arg Leu Pro Pro His Gly Trp Gln Arg Ala
385           390           395           400
Gly Cys Met Gln Trp Arg Leu Leu Gly Pro Ala Gln Pro Arg Asn Ser
405           410           415
Ala Arg Tyr Gln Tyr Trp Leu Phe Ser Leu Leu Ala Val Val Pro Leu

```



```

          420          425          430
Val Ser His Asp Cys Thr Phe Val Gly Arg Lys Val Ile His Thr Cys
          435          440          445
Ile Thr Trp Ser Leu Asp Ala Glu Val Pro Ile His His Thr Cys Pro
          450          455          460
Ile Ala Pro Thr Leu Leu Tyr
          465          470

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<210> 2815  
 <211> 1421  
 <212> DNA  
 <213> Homo sapiens

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<400> 2815
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120
tgccggggaga cttaggggtc atgctttgtg cccagggcca cccagaggag aaggccaccc
180
cgcttgaggg cacaggccat gaggggctct caggagggtg tgctgatgtg gcttctggtg
240
ttggcagtgg gcggcacaga gcacgcctac cgccccggcc gtaggggtgtg tgcgtgccgg
300
gctcacgggg accctgtctc cgagtcgttc gtgcagcgtg tgtaccagcc ctctctcacc
360
acctgcgacg ggcaccgggc ctgcagcacc taccgaacca tctataggac cgctaccgc
420
cgagcccctg ggctggcccc tgccaggcct cgctacgctg gctgccccgg ctggaagagg
480
accagcgggc ttcctggggc ctgtggagca gcaatatgcc agccgccatg ccggaacgga
540
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600
cagtcagatg tggatgaatg cagtgttagg agggggcggt gtccccagcg ctgcgtcaac
660
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720
ctctgtgtgc ccaagggagg gccccccagg gtggccccca acccgacagg agtggacagt
780
gcaatgaagg aagaagtgca gagctgcag tccagggtgg acctgctgga ggagaagctg
840
cagctgggtg tggccccact gcacagcctg gcctcgagg caggagcatg ggctcccgga
900
ccccggcagc ctctggtg actccttcca gcagctcggc cgcacgact ccctgagcga
960
gcagatttcc ttcctggagg agcagctggg gtctgtctcc tgcaagaaag actcngtgac
1020
tgccagcgc cccaggctgg actgagcccc tcacgccgcc ctgcagcccc catgccccctg
1080
cccaacatgc tgggggtcca gaagccacct cggggtgact gagcggaagg ccaggcaggg
1140
ccttctctct cttctctctc cccttctca ggaggctccc cagaccctgg catgggatgg
1200

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gctgggatct tctctgtgaa tccacccctg gctaccccca ccctggctac cccaacggca  
 1260  
 tcccaaggcc aggtgggccc tcagctgagg gaaggtacga gctccctgct ggagcctggg  
 1320  
 acccatggca caggccaggc agcccggagg ctgggtgggg cctcagtggg ggctgctgcc  
 1380  
 tgaccccccag cacaataaaa atgaacgtg aaaaaaaaaa a  
 1421

<210> 2816

<211> 307

<212> PRT

<213> Homo sapiens

<400> 2816

Met Arg Gly Ser Gln Glu Val Leu Leu Met Trp Leu Leu Val Leu Ala  
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 Val Gly Gly Thr Glu His Ala Tyr Arg Pro Gly Arg Arg Val Cys Ala  
 20 25 30  
 Val Arg Ala His Gly Asp Pro Val Ser Glu Ser Phe Val Gln Arg Val  
 35 40 45  
 Tyr Gln Pro Phe Leu Thr Thr Cys Asp Gly His Arg Ala Cys Ser Thr  
 50 55 60  
 Tyr Arg Thr Ile Tyr Arg Thr Ala Tyr Arg Arg Ser Pro Gly Leu Ala  
 65 70 75 80  
 Pro Ala Arg Pro Arg Tyr Ala Cys Cys Pro Gly Trp Lys Arg Thr Ser  
 85 90 95  
 Gly Leu Pro Gly Ala Cys Gly Ala Ala Ile Cys Gln Pro Pro Cys Arg  
 100 105 110  
 Asn Gly Gly Ser Cys Val Gln Pro Gly Arg Cys Arg Cys Pro Ala Gly  
 115 120 125  
 Trp Arg Gly Asp Thr Cys Gln Ser Asp Val Asp Glu Cys Ser Ala Arg  
 130 135 140  
 Arg Gly Gly Cys Pro Gln Arg Cys Val Asn Thr Ala Gly Ser Tyr Trp  
 145 150 155 160  
 Cys Gln Cys Trp Glu Gly His Ser Leu Ser Ala Asp Gly Thr Leu Cys  
 165 170 175  
 Val Pro Lys Gly Gly Pro Pro Arg Val Ala Pro Asn Pro Thr Gly Val  
 180 185 190  
 Asp Ser Ala Met Lys Glu Glu Val Gln Arg Leu Gln Ser Arg Val Asp  
 195 200 205  
 Leu Leu Glu Glu Lys Leu Gln Leu Val Leu Ala Pro Leu His Ser Leu  
 210 215 220  
 Ala Ser Gln Ala Gly Ala Trp Ala Pro Gly Pro Arg Gln Pro Pro Gly  
 225 230 235 240  
 Ala Leu Leu Pro Ala Ala Arg Pro His Arg Leu Pro Glu Arg Ala Asp  
 245 250 255  
 Phe Leu Pro Gly Gly Ala Ala Gly Val Leu Leu Gln Glu Arg Leu  
 260 265 270  
 Xaa Asp Cys Pro Ala Pro Gln Ala Gly Leu Ser Pro Ser Arg Arg Pro  
 275 280 285  
 Ala Ala Pro Met Pro Leu Pro Asn Met Leu Gly Val Gln Lys Pro Pro  
 290 295 300  
 Arg Gly Asp

305

&lt;210&gt; 2817

&lt;211&gt; 219

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2817

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nntggctttt ctgtctctct ctcttttttt cttgtagatc acgagctgct caggcaagag
60
ctgaacacgc ggtttctggt gcagagcgcc gagcggcctg gcgcctccct gggcccgggg
120
gttctgctgc gggcgaggtt ccatcagcac cagcacacac accagcacac gcaccaaacac
180
acacaccagc accaacacac attcgccccc ttcacgcgt
219

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&lt;210&gt; 2818

&lt;211&gt; 73

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2818

```

Xaa Gly Phe Ser Val Ser Leu Ser Phe Phe Leu Val Asp His Glu Leu
 1           5           10          15
Leu Arg Gln Glu Leu Asn Thr Arg Phe Leu Val Gln Ser Ala Glu Arg
 20          25          30
Pro Gly Ala Ser Leu Gly Pro Gly Val Leu Leu Arg Ala Glu Phe His
 35          40          45
Gln His Gln His Thr His Gln His Thr His Gln His Thr His Gln His
 50          55          60
Gln His Thr Phe Ala Pro Phe Thr Arg
65          70

```

&lt;210&gt; 2819

&lt;211&gt; 730

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2819

```

ncgaccgccg tgccccagat caacatcact atcttgaaag gggagaaggg tgaccgcgga
60
gatcgaggcc tccaagggaa atatggcaaa acaggctcag caggggccag gggccacact
120
ggacccaaag ggcagaaggg ctccatgggg gccctgggg agcgggtgaa gagccactac
180
gccgcctttt cggtgggccg ggaagcccat gcacagcaac cactactacc agacgtgatc
240
ttcgacacgg agttctgtaa cctctacgac cacttcaaca tgttcaccgg caagttctac
300
tgctacgtgc cgggcctcta cttcttcagc ctcaacgtgc acacctggaa ccagaaggag
360
acctacctgc acatcatgaa gaacgaggag gaggtggtga tcttggtcgc gcaggtgggc
420

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2053

gaccgcagca tcatgcaaag ccagagcctg atgctggagc tgcgagagca ggaccagggtg  
 480  
 tgggtacgcc tctacaaggc cgaacgtgag aacgccatct tcagcgagga gctggacacc  
 540  
 tacatcacct tcagtggcta cctgggtcaag cacgccaccg agccctagct ggccggccac  
 600  
 ctcttttctc ctgcgccact tccaccctcg cgctgtgctg accccaccgc ctcttccccg  
 660  
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 720  
 gccaaagcga  
 730

<210> 2820

<211> 195

<212> PRT

<213> Homo sapiens

<400> 2820

Xaa	Thr	Ala	Val	Pro	Gln	Ile	Asn	Ile	Thr	Ile	Leu	Lys	Gly	Glu	Lys
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Gly	Asp	Arg	Gly	Asp	Arg	Gly	Leu	Gln	Gly	Lys	Tyr	Gly	Lys	Thr	Gly
		20					25						30		
Ser	Ala	Gly	Ala	Arg	Gly	His	Thr	Gly	Pro	Lys	Gly	Gln	Lys	Gly	Ser
		35					40					45			
Met	Gly	Ala	Pro	Gly	Glu	Arg	Cys	Lys	Ser	His	Tyr	Ala	Ala	Phe	Ser
	50					55					60				
Val	Gly	Arg	Glu	Ala	His	Ala	Gln	Gln	Pro	Leu	Leu	Pro	Asp	Val	Ile
	65				70				75					80	
Phe	Asp	Thr	Glu	Phe	Val	Asn	Leu	Tyr	Asp	His	Phe	Asn	Met	Phe	Thr
			85						90					95	
Gly	Lys	Phe	Tyr	Cys	Tyr	Val	Pro	Gly	Leu	Tyr	Phe	Phe	Ser	Leu	Asn
			100					105					110		
Val	His	Thr	Trp	Asn	Gln	Lys	Glu	Thr	Tyr	Leu	His	Ile	Met	Lys	Asn
		115					120						125		
Glu	Glu	Glu	Val	Val	Ile	Leu	Phe	Ala	Gln	Val	Gly	Asp	Arg	Ser	Ile
	130					135					140				
Met	Gln	Ser	Gln	Ser	Leu	Met	Leu	Glu	Leu	Arg	Glu	Gln	Asp	Gln	Val
	145				150					155				160	
Trp	Val	Arg	Leu	Tyr	Lys	Gly	Glu	Arg	Glu	Asn	Ala	Ile	Phe	Ser	Glu
			165						170					175	
Glu	Leu	Asp	Thr	Tyr	Ile	Thr	Phe	Ser	Gly	Tyr	Leu	Val	Lys	His	Ala
		180						185					190		
Thr	Glu	Pro													
		195													

<210> 2821

<211> 1746

<212> DNA

<213> Homo sapiens

<400> 2821

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taaaaggcag gagcttcgtg ttgtgggtct gctaaccctg acgtttccgt gggcaagtcg  
120  
tgtgtactcc tcgccatggc acaactccaa acacgtttct acactgataa caagaaatat  
180  
gcagtagatg atgttccttt ctcaatccct gccacctcag aagttgctga ccttagtaat  
240  
attatcaata aattgctgga gacaaaaaat gagctccaca aacatgtgga gtttgatttc  
300  
ctcatcaagg gccagtttct tcgaatgcc ttggacaaac acatggaaat ggaagacatc  
360  
tcatacagaag aagttgtgga aatagaatac gtggagaagt atactgcacc ccagccagag  
420  
caatgcatgt tccatgatga ctggatcagt tcaattaaag gggcagagga atggatcttg  
480  
actggttctt atggtaagac ttctcggatc tggtccttgg aaggaaagtc aataatgaca  
540  
attgtgggac atacggatgt tgtaaaagat gtggcctggg tgaaaaaaga tagtttgtcc  
600  
tgcttattan ttgagtgcct ctatggatca gactattctc ttatgggagt ggaatgtaga  
660  
gagaaacaaa gtgaaagccc tacactgctg nntagaggtc atgctggaag tgtagattct  
720  
atagctgttg atggctcagg aactaaattt tgcagtggct cctgggataa gatgctaaag  
780  
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840  
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1020  
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1560  
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1620  
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1740

cctagg

1746

<210> 2822

<211> 424

<212> PRT

<213> Homo sapiens

<400> 2822

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Met Ala Gln Leu Gln Thr Arg Phe Tyr Thr Asp Asn Lys Lys Tyr Ala
 1           5           10           15
Val Asp Asp Val Pro Phe Ser Ile Pro Ala Thr Ser Glu Val Ala Asp
      20           25           30
Leu Ser Asn Ile Ile Asn Lys Leu Leu Glu Thr Lys Asn Glu Leu His
 35           40           45
Lys His Val Glu Phe Asp Phe Leu Ile Lys Gly Gln Phe Leu Arg Met
 50           55           60
Pro Leu Asp Lys His Met Glu Met Glu Asp Ile Ser Ser Glu Glu Val
 65           70           75           80
Val Glu Ile Glu Tyr Val Glu Lys Tyr Thr Ala Pro Gln Pro Glu Gln
      85           90           95
Cys Met Phe His Asp Asp Trp Ile Ser Ser Ile Lys Gly Ala Glu Glu
      100          105          110
Trp Ile Leu Thr Gly Ser Tyr Gly Lys Thr Ser Arg Ile Trp Ser Leu
      115          120          125
Glu Gly Lys Ser Ile Met Thr Ile Val Gly His Thr Asp Val Val Lys
      130          135          140
Asp Val Ala Trp Val Lys Lys Asp Ser Leu Ser Cys Leu Leu Xaa Glu
      145          150          155          160
Cys Phe Tyr Gly Ser Asp Tyr Ser Leu Met Gly Val Glu Cys Arg Glu
      165          170          175
Lys Gln Ser Glu Ser Pro Thr Leu Leu Xaa Arg Gly His Ala Gly Ser
      180          185          190
Val Asp Ser Ile Ala Val Asp Gly Ser Gly Thr Lys Phe Cys Ser Gly
      195          200          205
Ser Trp Asp Lys Met Leu Lys Ile Trp Ser Thr Val Pro Thr Asp Glu
      210          215          220
Glu Asp Glu Met Glu Glu Ser Thr Asn Arg Pro Arg Lys Lys Gln Lys
      225          230          235          240
Thr Glu Gln Leu Gly Leu Thr Arg Thr Pro Ile Val Thr Leu Ser Gly
      245          250          255
His Met Glu Ala Val Ser Ser Val Leu Trp Ser Asp Ala Glu Glu Ile
      260          265          270
Cys Ser Ala Ser Trp Asp His Thr Ile Arg Val Trp Asp Val Glu Ser
      275          280          285
Gly Ser Leu Lys Ser Thr Leu Thr Gly Asn Lys Val Phe Asn Cys Ile
      290          295          300
Ser Tyr Ser Pro Leu Cys Lys Arg Leu Ala Ser Gly Ser Thr Asp Arg
      305          310          315          320
His Ile Arg Leu Trp Asp Pro Arg Thr Lys Asp Gly Ser Leu Val Ser
      325          330          335
Leu Ser Leu Thr Ser His Thr Gly Trp Val Thr Ser Val Lys Trp Ser

```

```

          340          345          350
Pro Thr His Glu Gln Gln Leu Ile Ser Gly Ser Leu Asp Asn Ile Val
          355          360          365
Lys Leu Trp Asp Thr Arg Ser Cys Lys Ala Pro Leu Tyr Asp Leu Ala
          370          375          380
Ala His Glu Asp Lys Val Leu Ser Val Asp Trp Thr Asp Thr Gly Leu
          385          390          395          400
Leu Leu Ser Gly Gly Ala Asp Asn Lys Leu Tyr Ser Tyr Arg Tyr Ser
          405          410          415
Pro Thr Thr Ser His Val Gly Ala
          420

```

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<210> 2823
<211> 461
<212> DNA
<213> Homo sapiens

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<400> 2823
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120
ggtgggtggt gaccctctgt gggaggcaga cacagtcaca ggcgtcgccc ttgggaaggg
180
cagccggaga agctggccct gtgtgggcct gggcctgtag ggtttccag tggctttgctg
240
gagccagaga gctggatggc acctgggtcca gccaaagcaa gcccagaggg caggggctgg
300
atgggggacac gcacatgtcc cttggccacg acaaaatggc agtgatgctg cttgccttcc
360
tgcagcatct gtgaggatca aatgcgtgca cctacgcaaa gcacccgcac atagcaagtg
420
ctcacctagc acaggagccc cgtgctcctc ccaagtctca g
461

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<210> 2824
<211> 81
<212> PRT
<213> Homo sapiens

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<400> 2824
Met Cys Val Ser Pro Ser Ser Pro Cys Pro Arg Gly Phe Ala Trp Leu
1          5          10          15
Asp Gln Val Pro Ser Ser Ser Leu Ala Pro Gln Ser His Trp Glu Thr
20          25          30
Leu Gln Ala Gln Ala His Thr Gly Pro Ala Ser Pro Ala Ala Leu Pro
35          40          45
Lys Gly Asp Ala Cys Asp Cys Val Cys Leu Pro Thr Gly Val Thr Thr
50          55          60
His Pro Arg Pro Pro Glu Pro Gln His Glu Gly Ser Ala Pro Phe Pro
65          70          75          80
His

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<210> 2825  
<211> 1520  
<212> DNA  
<213> Homo sapiens

<400> 2825  
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120  
gatggacatg tagagggtggc acgtttgctt ttggatagtg gtgctcaagt gaacatgcct  
180  
gcagattcat ttgaatctcc attgacgcta gctgcctgtg gaggacatgt tgaattggca  
240  
gctctactta ttgaaagggg agcaaactct gaagaagtta atgatgaagg atacactccc  
300  
ttgatggaag cagctcgaga aggacatgaa gaaatgggtg cattacttct tagcacaagg  
360  
agcnaaatat caatgcacag acagaagaaa ctcaagaaac tgctcttgac tctggcttgc  
420  
tgtggaggct ttctggaagt ggcagacttt ctaattaagg caggagccga tatagaacta  
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540  
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600  
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660  
ttagacaagc aggaggacat gaagactatt ttggagggca tagatccggc caagcatctg  
720  
gaacatgaat ctgaaggttg aagaactcct ttaatgaaag ctgcaagagc tggctcatgtt  
780  
tgtactgttc agttcttaat tagtaaagga gcgaatgtga atagaaccac agctaataat  
840  
gaccatactg tactgtccct ggcttgtgca gggggtcac tggcagtggt ggaactactt  
900  
ttggctcatg gggcagatcc tactcaccgt ttgaaagatg gctcaactat gttgatagaa  
960  
gcagcaaaag gtggccatac aagtgttgtt tgctatctct tggattatcc taataacttg  
1020  
ctttcagccc ctccaccaga tgtcactcag ttaactcccc catcccacga tttaaatagg  
1080  
gtctctctgt taccagttca agcactgccc atgggtgttc cacctcagga gcctgacaaa  
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1260  
ccagagagca ttgtagaaga ggctcaggga aagttaacag aactggaaca gaggataaaa  
1320  
gaagccatag aaaagaatgc acagctgcag tccttggaac tggctcatgc tgaccaactt  
1380  
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<210> 2826  
 <211> 506  
 <212> PRT  
 <213> Homo sapiens

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 Gly Tyr Thr Pro Leu Met Glu Ala Ala Arg Glu Gly His Glu Glu Met  
 100 105 110  
 Val Ala Leu Leu Ser Thr Arg Ser Xaa Ile Ser Met His Arg Gln  
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 Lys Lys Leu Lys Lys Leu Leu Leu Thr Leu Ala Cys Cys Gly Gly Phe  
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<213> Homo sapiens
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<210> 2828
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<212> PRT
<213> Homo sapiens
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Leu Tyr Pro Gly Gly Cys Gln Gln Leu Leu His Leu Cys Val Gln Gln
      35           40           45
Pro Leu Gln Leu Leu Gln Val Glu Phe Leu Arg Leu Asn Thr His Glu
      50           55           60
Asp Pro Gln Leu Leu Glu Ala Thr Leu Ala Gln Leu Pro Gln Asn Leu
      65           70           75           80
Ser Cys Leu Arg Ser Leu Val Leu Lys Arg Gly Gln Arg Arg Asp Thr
      85           90           95
Leu Gly Ala Cys Leu Arg Gly Ala Leu Thr Asn Leu Pro Ala Gly Leu
      100          105          110
Ser Gly Leu Ala His Leu Ala His Leu Asp Leu Ser Phe Asn Ser Leu
      115          120          125
Glu Thr Leu Pro Ala Cys Val Leu Gln Met Arg Gly Leu Gly Ala Leu
      130          135          140
Leu Leu Ser His Asn Cys Leu Ser Glu Leu Pro Glu Ala Leu Gly Ala
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&lt;210&gt; 2829

&lt;211&gt; 3648

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2829

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&lt;210&gt; 2830

&lt;211&gt; 668

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2830

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 Leu Ser Ala Leu Ser Gln Leu Val Pro Cys Val Gly Cys Arg Arg Ser  
 50 55 60  
 Val Glu Arg Leu Phe Ser Gln Leu Val Glu Ser Gly Asn Pro Ala Leu

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Glu	Pro	Leu	Thr	Val	Gly	Pro
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Cys	Met	Thr	Asp	Ala	Lys	Lys
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Ser	Lys	Leu	Asn	Asp	Met	Ile
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Lys	Arg	Cys	Gln	Leu	His	Ser
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Gly	Gly	Cys	Trp	Met	Asp	Val
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Asp	Glu	Val	Val	Leu	Ile	Asp
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Thr	Tyr	Leu	Arg	Lys	His	Arg
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Leu	Arg	Ala	Tyr	Asn	Ile	Leu
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Lys	Gly	Tyr	Cys	Ala	Ala	Leu
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Glu	Arg	His	Ile	His	Val	Cys
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Leu	Gly	Arg	Ala	Glu	Pro	Glu
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Arg	His	Ala	Lys	Thr	Ile	Asp
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Leu	Gly	Ile	His	Leu	Tyr	Glu
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Arg	Ala	Glu	Glu	Gln	Thr	Trp
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Ala	Leu	Arg	Lys	Ser	Phe	Glu
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Ser	Arg	Leu	Glu	Gln	Leu	Cys
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Arg	Glu	Leu	Lys	Gln	Glu	Lys
		340		345		350
Lys	Asn	Lys	Cys	Val	Cys	Asp
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Glu	Lys	Glu	Val	Ser	Gln	Glu
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Ser	Cys	Lys	Ala	Cys	Gly	Ser
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Val	Ile	Val	Thr	Asn	Glu	Asn
		405		410		415
Asn	Leu	Leu	Gly	Ser	Pro	Lys
		420		425		430
Asn	Gly	Ser	Asp	Cys	Gly	Tyr
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Gly	Ser	Arg	Glu	Gly	Ser	Asp
		450		455		460
His	Asp	Glu	His	Gly	Asp	Ser
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Glu	Asp	Asp	Gly	Asp	Ser	Cys
		485		490		495
Asn	Asp	Thr	Lys	Gly	Lys	Asn

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Arg Asp Lys Thr Lys Asp Thr His	Pro Glu Ser Cys Cys Ser Ser Glu	
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Lys Gly Gly Gln Pro Leu Pro Trp Phe	Glu His Arg Lys Asn Val Pro	
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Asp Glu Glu Ile Phe Ile Ser Gln Asp Glu Ile	Gln Ser Phe Met Ala	
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Lys Glu Lys Phe Asn Lys Tyr Cys Arg Leu Asn Asp His Lys Arg Pro		
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Ile Cys Ser Gly Trp Leu Thr Thr Ala Gly Ala Asn		
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&lt;210&gt; 2831

&lt;211&gt; 3986

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2831

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<210> 2832  
 <211> 611  
 <212> PRT  
 <213> Homo sapiens

<400> 2832  
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 Gly Thr Arg Thr Ser Ser Gly Arg Leu Arg Arg Leu Gly Asp Ser Ser  
 35 40 45  
 Gly Pro Ala Leu Lys Arg Ser Phe Glu Val Glu Glu Val Glu Thr Pro  
 50 55 60  
 Asn Ser Thr Pro Pro Arg Arg Val Gln Thr Pro Leu Leu Arg Ala Thr  
 65 70 75 80  
 Val Ala Ser Ser Thr Gln Lys Phe Gln Asp Leu Gly Val Lys Asn Ser  
 85 90 95  
 Glu Pro Ser Ala Arg His Val Asp Ser Leu Ser Gln Arg Ser Pro Lys  
 100 105 110  
 Ala Ser Leu Arg Arg Val Glu Leu Ser Gly Pro Lys Ala Ala Glu Pro  
 115 120 125  
 Val Ser Arg Arg Thr Glu Leu Ser Ile Asp Ile Ser Ser Lys Gln Val  
 130 135 140  
 Glu Asn Ala Gly Ala Ile Gly Pro Ser Arg Phe Gly Leu Lys Arg Ala  
 145 150 155 160  
 Glu Val Leu Gly His Lys Thr Pro Glu Pro Ala Pro Arg Arg Thr Glu  
 165 170 175  
 Ile Thr Ile Val Lys Pro Gln Glu Ser Ala His Arg Arg Met Glu Pro  
 180 185 190  
 Pro Ala Ser Lys Val Pro Glu Val Pro Thr Ala Pro Ala Thr Asp Ala  
 195 200 205  
 Ala Pro Lys Arg Val Glu Ile Gln Met Pro Lys Pro Ala Glu Ala Pro  
 210 215 220  
 Thr Ala Pro Ser Pro Ala Gln Thr Leu Glu Asn Ser Glu Pro Ala Pro  
 225 230 235 240  
 Val Ser Gln Leu Gln Ser Arg Leu Glu Pro Lys Pro Gln Pro Pro Val  
 245 250 255  
 Ala Glu Ala Thr Pro Arg Ser Gln Glu Ala Thr Glu Ala Ala Pro Ser  
 260 265 270  
 Cys Val Gly Asp Met Ala Asp Thr Pro Arg Asp Ala Gly Leu Lys Gln  
 275 280 285  
 Ala Pro Ala Ser Arg Asn Glu Lys Ala Pro Val Asp Phe Gly Tyr Val  
 290 295 300  
 Gly Ile Asp Ser Ile Leu Glu Gln Met Arg Arg Lys Ala Met Lys Gln  
 305 310 315 320  
 Gly Phe Glu Phe Asn Ile Met Val Val Gly Gln Ser Gly Leu Gly Lys  
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 Ser Thr Leu Ile Asn Thr Leu Phe Lys Ser Lys Ile Ser Arg Lys Ser  
 340 345 350  
 Val Gln Pro Thr Ser Glu Glu Arg Ile Pro Lys Thr Ile Glu Ile Lys  
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 Ser Ile Thr His Asp Ile Glu Glu Lys Gly Val Arg Met Lys Leu Thr

```

      370      375      380
Val Ile Asp Thr Pro Gly Phe Gly Asp His Ile Asn Asn Glu Asn Cys
385      390      395      400
Trp Gln Pro Ile Met Lys Phe Ile Asn Asp Gln Tyr Glu Lys Tyr Leu
      405      410      415
Gln Glu Glu Val Asn Ile Asn Arg Lys Lys Arg Ile Pro Asp Thr Arg
      420      425      430
Val His Cys Cys Leu Tyr Phe Ile Pro Ala Thr Gly His Ser Leu Arg
      435      440      445
Pro Leu Asp Ile Glu Phe Met Lys Arg Leu Ser Lys Val Val Asn Ile
      450      455      460
Val Pro Val Ile Ala Lys Ala Asp Thr Leu Thr Leu Glu Glu Arg Val
      465      470      475      480
His Phe Lys Gln Arg Ile Thr Ala Asp Leu Leu Ser Asn Gly Ile Asp
      485      490      495
Val Tyr Pro Gln Lys Glu Phe Asp Glu Asp Ser Glu Asp Arg Leu Val
      500      505      510
Asn Glu Lys Phe Arg Glu Met Ile Pro Phe Ala Val Val Gly Ser Asp
      515      520      525
His Glu Tyr Gln Val Asn Gly Lys Arg Ile Leu Gly Arg Lys Thr Lys
      530      535      540
Trp Gly Thr Ile Glu Val Glu Asn Thr Thr His Cys Glu Phe Ala Tyr
      545      550      555      560
Leu Arg Asp Leu Leu Ile Arg Thr His Met Gln Asn Ile Lys Asp Ile
      565      570      575
Thr Ser Ser Ile His Phe Glu Ala Tyr Arg Val Lys Arg Leu Asn Glu
      580      585      590
Gly Ser Ser Ala Met Ala Asn Gly Val Glu Glu Lys Glu Pro Glu Ala
      595      600      605
Pro Glu Met
      610

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&lt;210&gt; 2833

&lt;211&gt; 420

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2833

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gctgtcaaga tgctggggtc cctggtgttg aggagaaaag cactggcgcc acggctactc
120
ctccggctgc tcaggtcccc aacgctccgg ggccatggag gtgcttccgg ccggaatgtg
180
actactggga gtctcgggga gccgcagtgg ctgagggtag ccaccggggg gcgccctgga
240
acatcgccgg ccttgttctc cggacgtggg gcagccaccg gggggcgcca gggaggacgc
300
ttcgatacca aatgcctcgc ggctgccact tggggacgcc ttctgtgtcc cgaagaaaca
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420

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&lt;210&gt; 2834

<211> 117  
 <212> PRT  
 <213> Homo sapiens

<400> 2834  
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 Leu Leu Arg Leu Leu Arg Ser Pro Thr Leu Arg Gly His Gly Gly Ala  
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 Ser Gly Arg Asn Val Thr Thr Gly Ser Leu Gly Glu Pro Gln Trp Leu  
 35 40 45  
 Arg Val Ala Thr Gly Gly Arg Pro Gly Thr Ser Pro Ala Leu Phe Ser  
 50 55 60  
 Gly Arg Gly Ala Ala Thr Gly Gly Arg Gln Gly Gly Arg Phe Asp Thr  
 65 70 75 80  
 Lys Cys Leu Ala Ala Thr Trp Gly Arg Leu Pro Gly Pro Glu Glu  
 85 90 95  
 Thr Leu Pro Gly Gln Asp Ser Trp Asn Gly Val Pro Ser Arg Ala Gly  
 100 105 110  
 Leu Gly Met Cys Ala  
 115

<210> 2835  
 <211> 938  
 <212> DNA  
 <213> Homo sapiens

<400> 2835  
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 120  
 tgagtgggtt actgctgcgg gcaactggga ctccatcctg ctgggcatcc tctgagagtt  
 180  
 tatgtagaat acacttcaga attgtctcgc tcaaggacaa tgaagctgag gtctgtctcc  
 240  
 ttattgactc aggggttctg ctccctggga cattaacccc ccaacacttc tagcttgccc  
 300  
 agtgcactga ctgagcacac agctgtggcc accagagaac ctctttgggc tgtgatacag  
 360  
 gaaaccatcg gtgtgcatgg taactctcta gcagtgtcct tcattgccggg acatggggac  
 420  
 acgggcaggc actgctggca tctgctaacc cggaggccc atacttcaga accggtcagc  
 480  
 tgggccaagg cctctctaag gcccgaggc tctcatgggc aaatgtcagg tgacacagag  
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 tcagagaccc tgagtgtgcg aggggaagat attggtgaag acctgttctc tgaggccctg  
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 ggccgggcag tggggcagtg ggcgggggccc aagctgctgg accatggctg tgtggagagc  
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 720  
 gggctgagga atctgtcaga ggaaaaatcga gacaagctgg accactgcct tcaggaagcc  
 780

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 840  
 tgggtgctctg agtcaagtc tgcctccaccg cccagctccc cccagaggcc acctcgcccc  
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<210> 2836  
 <211> 178  
 <212> PRT  
 <213> Homo sapiens

<400> 2836  
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 Arg Pro Ser Gly Ser His Gly Gln Met Ser Gly Asp Thr Glu Ser Glu  
 35 40 45  
 Thr Leu Ser Val Arg Gly Glu Asp Ile Gly Glu Asp Leu Phe Ser Glu  
 50 55 60  
 Ala Leu Gly Arg Ala Val Gly Gln Trp Ala Gly Ala Lys Leu Leu Asp  
 65 70 75 80  
 His Gly Cys Val Glu Ser Ser Ile Leu Asp Ser Ser Ala Gly Ser Ala  
 85 90 95  
 Pro His Tyr Glu Val Phe Val Ala Leu Arg Gly Leu Arg Asn Leu Ser  
 100 105 110  
 Glu Glu Asn Arg Asp Lys Leu Asp His Cys Leu Gln Glu Ala Ser Pro  
 115 120 125  
 Arg Tyr Lys Ser Leu Arg Phe Trp Gly Ser Val Gly Pro Ala Glu Ser  
 130 135 140  
 Thr Trp Trp Cys Pro Glu Ser Ser Pro Ala Pro Pro Ser Ser Pro  
 145 150 155 160  
 Gln Arg Pro Pro Arg Pro Ser Leu Trp Asp Leu Ser Gly Trp Gly Val  
 165 170 175  
 Leu Gly

<210> 2837  
 <211> 1250  
 <212> DNA  
 <213> Homo sapiens

<400> 2837  
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 180  
 gaattccagg agggaagccg agaatatgaa gctgaattgg agacgcagct gcaacaaatt  
 240  
 gaaaccagga acagagacct cctgtccgaa aataaccgcc ttcgcatgga gctggaaacc  
 300

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 360  
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 480  
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 660  
 gaagctgaga ggacagacac agctgtgcag gccacgggct ccgtgccgtc cacgcccatt  
 720  
 gctcaccgag gaccagctc aagttttaa acacctggga gcttcagacg tggcctggac  
 780  
 gacntccacc gggggacccc cctcacacct gcggcccgga tatcagccct caacattgtg  
 840  
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 900  
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 960  
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 1020  
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 1080  
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 1250

<210> 2838

<211> 370

<212> PRT

<213> Homo sapiens

<400> 2838

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Ile	Ser	Ser	Pro	Val	Phe	Thr	Met	Glu	Asp	Ser	Gly	Lys	Thr	Phe	Ser
			20					25					30		
Ser	Glu	Glu	Glu	Glu	Ala	Asn	Tyr	Trp	Lys	Asp	Leu	Ala	Met	Thr	Tyr
			35				40					45			
Lys	Gln	Arg	Ala	Glu	Asn	Thr	Gln	Glu	Glu	Leu	Arg	Glu	Phe	Gln	Glu
			50			55					60				
Gly	Ser	Arg	Glu	Tyr	Glu	Ala	Glu	Leu	Glu	Thr	Gln	Leu	Gln	Gln	Ile
65					70				75					80	
Glu	Thr	Arg	Asn	Arg	Asp	Leu	Leu	Ser	Glu	Asn	Asn	Arg	Leu	Arg	Met
			85					90					95		
Glu	Leu	Glu	Thr	Ile	Lys	Glu	Lys	Phe	Glu	Val	Gln	His	Ser	Glu	Gly
			100					105					110		
Tyr	Arg	Gln	Ile	Ser	Ala	Leu	Glu	Asp	Asp	Leu	Ala	Gln	Thr	Lys	Ala

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Ile Lys Asp Gln Leu Gln Lys Tyr Ile Arg Glu Leu Glu Gln Ala Asn
 130              135              140
Asp Ala Leu Glu Arg Ala Lys Arg Ala Thr Ile Met Ser Leu Glu Asp
 145              150              155              160
Phe Glu Gln Arg Leu Asn Gln Ala Ile Glu Arg Asn Ala Phe Leu Glu
      165              170              175
Ser Glu Leu Asp Glu Lys Glu Asn Leu Leu Glu Ser Val Gln Arg Leu
      180              185              190
Lys Asp Glu Ala Arg Asp Leu Arg Gln Glu Leu Ala Val Gln Gln Lys
      195              200              205
Gln Glu Lys Pro Arg Thr Pro Met Pro Ser Ser Val Glu Ala Glu Arg
      210              215              220
Thr Asp Thr Ala Val Gln Ala Thr Gly Ser Val Pro Ser Thr Pro Ile
 225              230              235              240
Ala His Arg Gly Pro Ser Ser Ser Leu Asn Thr Pro Gly Ser Phe Arg
      245              250              255
Arg Gly Leu Asp Asp Xaa His Arg Gly Thr Pro Leu Thr Pro Ala Ala
      260              265              270
Arg Ile Ser Ala Leu Asn Ile Val Gly Asp Leu Leu Arg Lys Val Gly
      275              280              285
Ala Leu Glu Ser Lys Leu Ala Ser Cys Arg Asn Leu Val Tyr Asp Gln
      290              295              300
Ser Pro Asn Arg Thr Gly Gly Pro Ala Ser Gly Arg Ser Ser Lys Asn
 305              310              315              320
Arg Asp Gly Gly Glu Arg Arg Pro Ser Ser Thr Ser Val Pro Leu Gly
      325              330              335
Asp Lys Gly Ser Val Pro Ser Asn Lys Pro Leu Ala Gly Gly Glu Asn
      340              345              350
Pro Pro Ala Pro Gly Lys Arg His Ser Pro Pro Ala His Ser His Val
      355              360              365
Ser Phe
      370

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&lt;210&gt; 2839

&lt;211&gt; 606

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2839

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240
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300
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aagctccaac tctacggtcc caccaacatt gccccatca tccagaaggt tgccaagtca
420

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 606

<210> 2840  
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 <212> PRT  
 <213> Homo sapiens

<400> 2840  
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 Ala Thr Asn Gly Asp Pro Arg Asn Ser Cys Ser Leu His Tyr Ile His  
 35 40 45  
 Pro Tyr Gln Pro Asn Glu Tyr Leu Lys Ala Leu Val Ala Val Gly Glu  
 50 55 60  
 Ile Cys Gln Asp Tyr Asp Ser Asp Lys Met Phe Pro Ala Phe Gly Phe  
 65 70 75 80  
 Gly Ala Arg Ile Pro Pro Glu Tyr Thr Val Ser His Asp Phe Ala Ile  
 85 90 95  
 Asn Phe Asn Glu Asp Asn Pro Glu Cys Ala Gly Ile Gln Gly Val Val  
 100 105 110  
 Glu Ala Tyr Gln Ser Cys Leu Pro Lys Leu Gln Leu Tyr Gly Pro Thr  
 115 120 125  
 Asn Ile Ala Pro Ile Ile Gln Lys Val Ala Lys Ser Ala Ser Glu Glu  
 130 135 140  
 Thr Asn Thr Lys Glu Ala Ser Gln Tyr Phe Ile Leu Leu Ile Leu Thr  
 145 150 155 160  
 Asp Gly Val Ile Thr Asp Met Gly Asp Thr Arg Glu Ala Ile Val His  
 165 170 175  
 Ala Ser His Leu Pro Met Ser Val Ile Ile Val Gly Val Gly Asn Ala  
 180 185 190  
 Asp Phe Ser Asp Met Gln Met Leu Asp Gly  
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<210> 2841  
 <211> 2065  
 <212> DNA  
 <213> Homo sapiens

<400> 2841  
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 1920  
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 2065

<210> 2842  
 <211> 540  
 <212> PRT  
 <213> Homo sapiens

<400> 2842  
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 Pro Pro Val Gly Thr Gly Arg Ser Pro Arg Lys Arg Thr Thr Ser Gln  
 35 40 45  
 Cys Lys Ser Glu Pro Pro Leu Leu Arg Thr Ser Lys Arg Thr Ile Tyr  
 50 55 60  
 Thr Ala Gly Arg Pro Pro Trp Tyr Asn Glu His Gly Thr Gln Ser Lys  
 65 70 75 80  
 Glu Ala Phe Ala Ile Gly Leu Gly Gly Gly Ser Ala Ser Gly Lys Thr  
 85 90 95  
 Thr Val Ala Arg Met Ile Ile Glu Ala Leu Asp Val Pro Trp Val Val  
 100 105 110  
 Leu Leu Ser Met Asp Ser Phe Tyr Lys Val Leu His Ser Leu Pro His  
 115 120 125  
 Gln Val Leu Thr Glu Gln Gln Gln Glu Gln Ala Ala His Asn Asn Phe  
 130 135 140  
 Asn Phe Asp His Pro Asp Ala Phe Asp Phe Asp Leu Ile Ile Ser Thr  
 145 150 155 160  
 Leu Lys Lys Leu Lys Gln Gly Lys Ser Val Lys Val Pro Ile Tyr Asp  
 165 170 175  
 Phe Thr Thr His Ser Arg Lys Lys Asp Trp Lys Thr Leu Tyr Gly Ala  
 180 185 190  
 Asn Val Ile Ile Phe Glu Gly Ile Met Ala Phe Ala Asp Lys Thr Leu  
 195 200 205  
 Leu Glu Leu Leu Asp Met Lys Ile Phe Val Asp Thr Asp Ser Asp Ile  
 210 215 220  
 Arg Leu Val Arg Arg Leu Arg Arg Asp Ile Ser Glu Arg Gly Arg Asp  
 225 230 235 240  
 Ile Glu Gly Val Ile Lys Gln Tyr Asn Lys Phe Val Lys Pro Ser Phe  
 245 250 255  
 Asp Gln Tyr Ile Gln Pro Thr Met Arg Leu Ala Asp Ile Val Val Pro  
 260 265 270  
 Arg Gly Ser Gly Asn Thr Val Ala Ile Asp Leu Ile Val Gln His Val  
 275 280 285  
 His Ser Gln Leu Glu Glu Arg Glu Leu Ser Val Arg Ala Ala Leu Ala

290                      295                      300  
 Ser Ala His Gln Cys His Pro Leu Pro Arg Thr Leu Ser Val Leu Lys  
 305                      310                      315                      320  
 Ser Thr Pro Gln Val Arg Gly Met His Thr Ile Ile Arg Asp Lys Glu  
                     325                      330                      335  
 Thr Ser Arg Asp Glu Phe Ile Phe Tyr Ser Lys Arg Leu Met Arg Leu  
                     340                      345                      350  
 Leu Ile Glu His Ala Leu Ser Phe Leu Pro Phe Gln Asp Cys Val Val  
                     355                      360                      365  
 Gln Thr Pro Gln Gly Gln Asp Tyr Ala Gly Lys Cys Tyr Ala Gly Lys  
                     370                      375                      380  
 Gln Ile Thr Gly Val Ser Ile Leu Arg Ala Gly Glu Thr Met Glu Pro  
 385                      390                      395                      400  
 Ala Leu Arg Ala Val Cys Lys Asp Val Arg Ile Gly Thr Ile Leu Ile  
                     405                      410                      415  
 Gln Thr Asn Gln Leu Thr Gly Glu Pro Glu Leu His Tyr Leu Arg Leu  
                     420                      425                      430  
 Pro Lys Asp Ile Ser Asp Asp His Val Ile Leu Met Asp Cys Thr Val  
                     435                      440                      445  
 Ser Thr Gly Ala Ala Ala Met Met Ala Val Arg Val Leu Leu Asp His  
                     450                      455                      460  
 Asp Val Pro Glu Asp Lys Ile Phe Leu Leu Ser Leu Leu Met Ala Glu  
 465                      470                      475                      480  
 Met Gly Val His Ser Val Ala Tyr Ala Phe Pro Arg Val Arg Ile Ile  
                     485                      490                      495  
 Thr Thr Ala Val Asp Lys Arg Val Asn Asp Leu Phe Arg Ile Ile Pro  
                     500                      505                      510  
 Gly Ile Gly Asn Phe Gly Asp Arg Tyr Phe Gly Thr Asp Ala Val Pro  
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&lt;210&gt; 2843

&lt;211&gt; 497

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2843

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Pro Phe Glu Met Pro Thr Gly Ala Leu Ser Thr Pro Gln Phe Glu  
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Arg Arg Gly Gly Arg Ala Arg Gly Gly Gln Gly Pro Arg Pro Asn Ile  
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<213> Homo sapiens

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Cys	His	Lys	Gly	Leu	Ser	Asp	Arg	Cys	Ser	Pro	Ser	Leu	Pro	Cys	Leu
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Pro	His	Arg	Pro	Ser	Pro	Pro	Glu	Pro	Ala	Phe	Leu	Pro	Gln	His	Leu
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Pro	Ser	Leu	Ala	Thr	Gly	Tyr	Ile	Cys	Val	Asp	Cys	Leu	Ser	Leu	His
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<212> DNA

<213> Homo sapiens

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Glu	Glu	Asp	Lys	Lys	Asp	Gly	Lys	Glu	Pro	Ser	Asp	Lys	Pro	Gln	Lys
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<213> Homo sapiens

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675					680					685					
Glu	Leu	Glu	Leu	Arg	Gln	Leu	Gln	Ala	Val	Gln	Arg	Thr	Arg	Ala	Glu
690					695					700					
Leu	Thr	Arg	Leu	Gln	His	Gln	Thr	Glu	Leu	Gly	Asn	Gln	Leu	Glu	Tyr
705					710					715					720
Asn	Lys	Arg	Arg	Glu	Gln	Glu	Leu	Arg	Gln	Lys	His	Ala	Ala	Gln	Val
				725					730					735	
Arg	Gln	Gln	Pro	Lys	Ser	Leu	Lys	Val	Arg	Ala	Gly	Gln	Arg	Pro	Pro
			740					745					750		
Gly	Leu	Pro	Leu	Pro	Ile	Pro	Gly	Ala	Leu	Gly	Pro	Pro	Asn	Thr	Gly
			755					760					765		
Thr	Pro	Ile	Glu	Gln	Gln	Pro	Cys	Ser	Pro	Gly	Gln	Glu	Ala	Val	Leu
			770					775					780		
Asp	Gln	Arg	Met	Leu	Gly	Glu	Glu	Glu	Glu	Ala	Val	Gly	Glu	Arg	Arg
785					790					795					800
Ile	Leu	Gly	Lys	Glu	Gly	Ala	Thr	Leu	Glu	Pro	Lys	Gln	Gln	Arg	Ile
			805						810					815	
Leu	Gly	Glu	Glu	Ser	Gly	Ala	Pro	Ser	Pro	Ser	Pro	Gln	Lys	His	Gly
			820					825					830		
Ser	Leu	Val	Asp	Glu	Glu	Val	Trp	Gly	Leu	Pro	Glu	Glu	Ile	Glu	Glu
			835					840					845		
Leu	Arg	Val	Pro	Ser	Leu	Val	Pro	Gln	Glu	Arg	Ser	Ile	Val	Gly	Gln
			850					855					860		
Glu	Glu	Ala	Gly	Thr	Trp	Ser	Leu	Trp	Gly	Lys	Glu	Asp	Glu	Ser	Leu
865					870					875					880
Leu	Asp	Glu	Glu	Phe	Glu	Leu	Gly	Trp	Val	Gln	Gly	Pro	Ala	Leu	Thr
			885						890					895	
Pro	Val	Pro	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Gly	Ala	Pro	Ile	Gly	
			900					905					910		
Thr	Pro	Arg	Asp	Pro	Gly	Asp	Gly	Cys	Pro	Ser	Pro	Asp	Ile	Pro	Pro
			915					920					925		
Glu	Pro	Pro	Pro	Thr	His	Leu	Arg	Pro	Cys	Pro	Ala	Ser	Gln	Leu	Pro
			930					935					940		
Gly	Leu	Leu	Ser	His	Gly	Leu	Leu	Ala	Gly	Leu	Ser	Phe	Ala	Val	Gly
			945					950					955		960
Ser	Ser	Ser	Gly	Leu	Pro	Leu	Leu	Leu	Leu	Leu	Leu	Leu	Leu	Pro	Leu
			965					970					975		
Leu	Ala	Ala	Gln	Gly	Gly	Gly	Gly	Leu	Gln	Ala	Ala	Leu	Leu	Ala	Leu
			980					985					990		
Glu	Val	Gly	Leu	Val	Gly	Leu	Gly	Ala	Ser	Tyr	Leu	Leu	Leu	Cys	Thr
			995					1000					1005		
Ala	Leu	His	Leu	Pro	Ser	Ser	Leu	Phe	Leu	Leu	Leu	Ala	Gln	Gly	Thr
			1010					1015					1020		
Ala	Leu	Gly	Ala	Val	Leu	Gly	Leu	Ser	Trp	Arg	Arg	Gly	Leu	Met	Gly
			1025					1030					1035		1040
Val	Pro	Leu	Gly	Leu	Gly	Ala	Ala	Trp	Leu	Leu	Ala	Trp	Pro	Gly	Leu
			1045					1050					1055		
Ala	Leu	Pro	Leu	Val	Ala	Met	Ala	Ala	Gly	Gly	Arg	Trp	Val	Arg	Gln
			1060					1065					1070		
Gln	Gly	Pro	Arg	Val	Arg	Arg	Gly	Ile	Ser	Arg	Leu	Trp	Leu	Arg	Val
			1075					1080					1085		
Leu	Leu	Arg	Leu	Ser	Pro	Met	Ala	Phe	Arg	Ala	Leu	Gln	Gly	Cys	Gly
			1090					1095					1100		
Ala	Val	Gly	Asp	Arg	Gly	Leu	Phe	Ala	Leu	Tyr	Pro	Lys	Thr	Asn	Lys

1105                      1110                      1115                      1120  
 Asp Gly Phe Arg Ser Arg Leu Pro Val Pro Gly Pro Arg Arg Arg Asn  
                                  1125                      1130                      1135  
 Pro Arg Thr Thr Gln His Pro Leu Ala Leu Leu Ala Arg Val Trp Val  
                                  1140                      1145                      1150  
 Leu Cys Lys Gly Trp Asn Trp Arg Leu Ala Arg Ala Ser Gln Gly Leu  
                                  1155                      1160                      1165  
 Ala Ser His Leu Pro Pro Trp Ala Ile His Thr Leu Ala Ser Trp Gly  
                                  1170                      1175                      1180  
 Leu Leu Arg Gly Glu Arg Pro Thr Arg Ile Pro Arg Leu Leu Pro Arg  
 1185                      1190                      1195                      1200  
 Ser Gln Arg Gln Leu Gly Pro Pro Ala Ser His Gln Pro Leu Pro Gly  
                                  1205                      1210                      1215  
 Thr Leu Ala Gly Arg Arg Ser Arg Thr Arg Gln Ser Arg Ala Leu Pro  
                                  1220                      1225                      1230  
 Pro Trp Arg  
                                  1235

<210> 2855  
 <211> 1676  
 <212> DNA  
 <213> Homo sapiens

<400> 2855  
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 120  
 gaggaagcca tctttgacac cctttgcacc gatgacagct ctgaagaggc aaagacactc  
 180  
 acaatggaca tattgacatt ggctcacacc tccacagaag ctaagggcct gtcctcagag  
 240  
 agcagcgcct cttccgacgg ccccatcca gtcacacccc cgtcacgggc ctcagagagc  
 300  
 agcgcctctt ccgacggccc ccatccagtc atcaccccg caggggcctc agagagcagc  
 360  
 gcctcttccg acggccccca tccagtcac accccgcat ggtccccggg atctgatgtc  
 420  
 actctcctcg ctgaagccct ggtgactgtc acaaacatcg aggttattaa ttgcagcatc  
 480  
 acagaaatag aaacaacgac ttccagcatc cctggggcct cagacacaga tctcatcccc  
 540  
 acggaagggg tgaaggcctc gtccacctcc gateccaccag ctctgcctga ctccnnactg  
 600  
 aagcaaaacc acacatcact gaggtcanca gcctctgccc agaccctgtc cacagccggc  
 660  
 accacagagt cagctgcacc tgatgccacg gttgggaccc cactccccac taacagcacc  
 720  
 atagaaagag aagtgcagc acccagggcc acgacctca gtggagctct ggtcacagtt  
 780  
 agcaggaatc ccctggaaga aacctcagcc ctctctgttg agacaccaag ttacgtcaaa  
 840  
 gtctcaggag cagctccggt ctccatagag gctgggtcag cagtgaggcaa aacaacttcc  
 900

tttgtctggga gctctgcttc ctctacagc ccctcggaag ccgccctcaa gaacttcacc  
 960  
 ccttcagaga caccgaccat ggacatcgca accaaggggc ccttccccac cagcagggac  
 1020  
 cctcttcctt ctgtccctcc gactacaacc aacagcagcc gagggacgaa cagcacctta  
 1080  
 gccaatgca caacctcagc gaagaccacg atgaagcccc caacagccac gccacgact  
 1140  
 gctcggacga ggccgaccac agacgtgagt gcaggtgaaa atggagggtc ctctcctgc  
 1200  
 ggctgagtgt ggcttccccg gaagacctca ctgacccag agtggcagaa aggctgatgc  
 1260  
 agcagctcca ccgggaactc cagccccag cgcctcactt ccagggtctcc ttactgctg  
 1320  
 tcaggagagg ctaacggaca tcagctgcag ccaggcatgt cccgtatgcc aaaagagggt  
 1380  
 gctgcccccta gctggggccc ccaccgacag actgcagctg cgttactgtg ctgagaggta  
 1440  
 cccagaaggt tcccatgaag ggcagcatgt ccaagcccct gacccagat gtggcaacag  
 1500  
 gaccctcgct cacatccacc ggagtgtatg tgtggggagg ggcttcacct gttccagag  
 1560  
 gtgtccttgg actcaccttg gcacatgttc tgtgtttcag taaagagaga cctgatcacc  
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 catctgtgtg ctccatcct gcattaaaat tcactcagtg tggccagaa aaaaaa  
 1676

<210> 2856

<211> 401

<212> PRT

<213> Homo sapiens

<400> 2856

Leu	Thr	Thr	Ser	Pro	Asn	Phe	Met	Val	Leu	Ile	Ala	Thr	Ser	Val	Glu
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Thr	Ser	Ala	Ala	Ser	Gly	Ser	Pro	Glu	Gly	Ala	Arg	Met	Thr	Thr	Val
			20					25					30		
Gln	Thr	Ile	Thr	Gly	Ser	Asp	Pro	Glu	Glu	Ala	Ile	Phe	Asp	Thr	Leu
		35				40					45				
Cys	Thr	Asp	Asp	Ser	Ser	Glu	Glu	Ala	Lys	Thr	Leu	Thr	Met	Asp	Ile
	50				55					60					
Leu	Thr	Leu	Ala	His	Thr	Ser	Thr	Glu	Ala	Lys	Gly	Leu	Ser	Ser	Glu
65				70					75					80	
Ser	Ser	Ala	Ser	Ser	Asp	Gly	Pro	His	Pro	Val	Ile	Thr	Pro	Ser	Arg
			85				90						95		
Ala	Ser	Glu	Ser	Ser	Ala	Ser	Ser	Asp	Gly	Pro	His	Pro	Val	Ile	Thr
		100				105					110				
Pro	Ser	Arg	Ala	Ser	Glu	Ser	Ser	Ala	Ser	Ser	Asp	Gly	Pro	His	Pro
		115				120					125				
Val	Ile	Thr	Pro	Ser	Trp	Ser	Pro	Gly	Ser	Asp	Val	Thr	Leu	Leu	Ala
	130				135					140					
Glu	Ala	Leu	Val	Thr	Val	Thr	Asn	Ile	Glu	Val	Ile	Asn	Cys	Ser	Ile
145				150					155				160		
Thr	Glu	Ile	Glu	Thr	Thr	Thr	Ser	Ser	Ile	Pro	Gly	Ala	Ser	Asp	Thr

```

      165      170      175
Asp Leu Ile Pro Thr Glu Gly Val Lys Ala Ser Ser Thr Ser Asp Pro
      180      185      190
Pro Ala Leu Pro Asp Ser Xaa Leu Lys Gln Asn His Thr Ser Leu Arg
      195      200      205
Ser Xaa Ala Ser Ala Glu Thr Leu Ser Thr Ala Gly Thr Thr Glu Ser
      210      215      220
Ala Ala Pro Asp Ala Thr Val Gly Thr Pro Leu Pro Thr Asn Ser Thr
      225      230      235      240
Ile Glu Arg Glu Val Thr Ala Pro Arg Ala Thr Thr Leu Ser Gly Ala
      245      250      255
Leu Val Thr Val Ser Arg Asn Pro Leu Glu Glu Thr Ser Ala Leu Ser
      260      265      270
Val Glu Thr Pro Ser Tyr Val Lys Val Ser Gly Ala Ala Pro Val Ser
      275      280      285
Ile Glu Ala Gly Ser Ala Val Gly Lys Thr Thr Ser Phe Ala Gly Ser
      290      295      300
Ser Ala Ser Ser Tyr Ser Pro Ser Glu Ala Ala Leu Lys Asn Phe Thr
      305      310      315      320
Pro Ser Glu Thr Pro Thr Met Asp Ile Ala Thr Lys Gly Pro Phe Pro
      325      330      335
Thr Ser Arg Asp Pro Leu Pro Ser Val Pro Pro Thr Thr Asn Ser
      340      345      350
Ser Arg Gly Thr Asn Ser Thr Leu Ala Lys Ile Thr Thr Ser Ala Lys
      355      360      365
Thr Thr Met Lys Pro Pro Thr Ala Thr Pro Thr Thr Ala Arg Thr Arg
      370      375      380
Pro Thr Thr Asp Val Ser Ala Gly Glu Asn Gly Gly Ser Ser Ser Cys
      385      390      395      400
Gly

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&lt;210&gt; 2857

&lt;211&gt; 1668

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2857

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ctgggtggga gttggtaggg tcgcaccggg acagcccga agagtctgtt tggggctggg
60
ggctgggagg gagagagtga ctcggttttc tgtgtaaact tggccgagggt tgccgcagga
120
aggctagcca gagggtaatt acacaggtgt aggccggcgg ggcgggcgga gggctcggga
180
ggcgcagggg actggaagag ttggctgcgc ccaggcacca ggtggaagaa tttccatacc
240
agccctgcgg aggtgcctct gttccagag gcgtttttgt acgaagggca ttttgaaagc
300
gaagcagaag ccgtagaatc agcggcgagc ctgttgaaag aacccacagg tgcatttcac
360
agcactctgg gcgaaaattg gatgtgaaaa tgaagccaga ccgagatact ctggatgaat
420
atattgaata tgatgcagag gagttcttgg tctctttggc ctgctgata acagaaggac
480

```

gaacacctga atgttctgta aaaggctgaa cagaaagctt tcattgccct ccagcacagt  
 540  
 cttgttacct agtaactacc aaacatgaat gtagtgacaa gctggcccag tgccgccaag  
 600  
 ccagacgaac taggtctgag gtcacattgt tgtggaagaa taaccttcca atcatggtgg  
 660  
 aaatgatgct actaccagac tgctgctaca gcgatgatgg gccaccaca gaggggaattg  
 720  
 atctaaatga tcctgcgatt aagcaagatg cattattatt agaaagatgg atcttggagc  
 780  
 cagttcctcg acagaatggt gaccgattta ttgaagagaa gacgcttctg ttggctgtcc  
 840  
 gctcatttgt gtttttttct cagttaagtg catggctgag tgtttctcat ggtgctattc  
 900  
 cacgaaatat tctctacaga atcagtgtcg ctgatgtaga cctacagtgg aatttttcac  
 960  
 agactccaat tgagcatgtg tttcctgttc ccaatgtttc tcacaatgtt gccttgaaag  
 1020  
 tcagtgggtca atccctggcc caaacaatct aattatccag ttttgacgtg cagtattcac  
 1080  
 actaatattg gcctttatga gaaaagaatt caacaacata aacttaaaac tcacagcac  
 1140  
 cataacccaa atgaagcaga acaatgtggt acaaacagtt cacagcgtct gtgtagcaaa  
 1200  
 caaacttgga ccattggcacc tgaagatgtg ttacatgcaa aaagtggccc aagtccagaa  
 1260  
 tatactgcag ctgtcaaaaa tatcaacta tatccaggca ctggcagtaa atctgacct  
 1320  
 gggacatctc aagccaatat tctaggcttt agtggatatag gtgatataaa atcacaagaa  
 1380  
 acatcagtga gaacttttaa atcattttca atggttgatt ccagtatctc taaccgccag  
 1440  
 agtttctggc agtcagctgg tgagactaac ctttaatatag gctctttaat tcaggagcgg  
 1500  
 caagaaatca ttgcaagaat tgetcaacat ttgattcatt gtgatccaag cacttcacat  
 1560  
 gtttctggac gtccatttaa tactcaagag tctagttcac tccattcaaa acttttccgg  
 1620  
 gtttcacaag aaaatgagaa cgtggggaaa aggtaaagaa gctttctc  
 1668

&lt;210&gt; 2858

&lt;211&gt; 220

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2858

Met Lys Pro Asp Arg Asp Thr Leu Asp Glu Tyr Phe Glu Tyr Asp Ala  
 1 5 10 15  
 Glu Glu Phe Leu Val Ser Leu Ala Leu Leu Ile Thr Glu Gly Arg Thr  
 20 25 30  
 Pro Glu Cys Ser Val Lys Gly Arg Thr Glu Ser Phe His Cys Pro Pro  
 35 40 45  
 Ala Gln Ser Cys Tyr Pro Val Thr Thr Lys His Glu Cys Ser Asp Lys

```

      50      55      60
Leu Ala Gln Cys Arg Gln Ala Arg Arg Thr Arg Ser Glu Val Thr Leu
65      70      75      80
Leu Trp Lys Asn Asn Leu Pro Ile Met Val Glu Met Met Leu Leu Pro
      85      90      95
Asp Cys Cys Tyr Ser Asp Asp Gly Pro Thr Thr Glu Gly Ile Asp Leu
      100      105      110
Asn Asp Pro Ala Ile Lys Gln Asp Ala Leu Leu Leu Arg Trp Ile
      115      120      125
Leu Glu Pro Val Pro Arg Gln Asn Gly Asp Arg Phe Ile Glu Glu Lys
      130      135      140
Thr Leu Leu Leu Ala Val Arg Ser Phe Val Phe Phe Ser Gln Leu Ser
145      150      155      160
Ala Trp Leu Ser Val Ser His Gly Ala Ile Pro Arg Asn Ile Leu Tyr
      165      170      175
Arg Ile Ser Ala Ala Asp Val Asp Leu Gln Trp Asn Phe Ser Gln Thr
      180      185      190
Pro Ile Glu His Val Phe Pro Val Pro Asn Val Ser His Asn Val Ala
      195      200      205
Leu Lys Val Ser Gly Gln Ser Leu Ala Gln Thr Ile
      210      215      220

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&lt;210&gt; 2859

&lt;211&gt; 1029

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2859

```

ntgcagaagg aaattgcact cgtctctctcc ggcggccggc gacccaacac aatgcaccag
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ccgcctgagt ccaccgcgcg gcccgccgcc gctgcagaca ttagcgctag gaagatggcg
120
caccggcaa tgttccctcg aaggggcagc ggtagtggca gcgcctctgc tctcaatgca
180
gcaggtaccg gcgtcggtag taatgccaca tcttcgagg attttccgcc tccgtcgctg
240
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300
agcctgaacc tcctttcgca ggctcagctg caggcacagc ctcttgcgcc aggcggaact
360
caaatgaaaa agaaaagtgg cttccagata actagcgta ctctgctca gatctccgct
420
agtatcagct ctaacaacag tatagcagag gacactgaga gctatgatga tctggatgaa
480
tctcacacgg aagatctctc ttcttcggag atccttgatg tgtaactttc cagggtact
540
gacttagggg agcccgaaag cagctcctca gaagagacce taaataactt ccaggaagcc
600
gagacacctg gggcagcttc tccaaccag cccacacctc ctacagcctca tttgcctcac
660
cttcacaaac agaattgtgt gatcaatggg aatgctcacc cacaccacct ccatcaccac
720
catcagattc atcatgggca ccacctccaa catggtcacc accatccacc tcatgttgct
780

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gtggccagtg catccattac tgggtgggcca cccccaagcc cagtatctag aaaactctct  
 840  
 acaactggaa gctctgacag tatcacacca gttgcaccaa cttctgctgt atcatccagt  
 900  
 gggtcacctg catctgtaat gactaatatg cgtgctccaa gtactacagg tggaataggt  
 960  
 ataaattctg ttactggcac tagtacagta aataatgtta acattactgc tgtgggtagt  
 1020  
 ttttaattcc  
 1029

<210> 2860

<211> 343

<212> PRT

<213> Homo sapiens

<400> 2860

Xaa Gln Lys Glu Ile Ala Leu Val Ser Ser Ala Pro Pro Gly Pro Asn  
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 Thr Met His Gln Pro Glu Ser Thr Ala Ala Ala Ala Ala Ala  
 20 25 30  
 Asp Ile Ser Ala Arg Lys Met Ala His Pro Ala Met Phe Pro Arg Arg  
 35 40 45  
 Gly Ser Gly Ser Gly Ser Ala Ser Ala Leu Asn Ala Ala Gly Thr Gly  
 50 55 60  
 Val Gly Ser Asn Ala Thr Ser Ser Glu Asp Phe Pro Pro Pro Ser Leu  
 65 70 75 80  
 Leu Gln Pro Pro Pro Ala Ala Ser Ser Thr Ser Gly Pro Gln Pro  
 85 90 95  
 Pro Pro Pro Gln Ser Leu Asn Leu Leu Ser Gln Ala Gln Leu Gln Ala  
 100 105 110  
 Gln Pro Leu Ala Pro Gly Gly Thr Gln Met Lys Lys Lys Ser Gly Phe  
 115 120 125  
 Gln Ile Thr Ser Val Thr Pro Ala Gln Ile Ser Ala Ser Ile Ser Ser  
 130 135 140  
 Asn Asn Ser Ile Ala Glu Asp Thr Glu Ser Tyr Asp Asp Leu Asp Glu  
 145 150 155 160  
 Ser His Thr Glu Asp Leu Ser Ser Ser Glu Ile Leu Asp Val Ser Leu  
 165 170 175  
 Ser Arg Ala Thr Asp Leu Gly Glu Pro Glu Arg Ser Ser Ser Glu Glu  
 180 185 190  
 Thr Leu Asn Asn Phe Gln Glu Ala Glu Thr Pro Gly Ala Val Ser Pro  
 195 200 205  
 Asn Gln Pro His Leu Pro Gln Pro His Leu Pro His Leu Pro Gln Gln  
 210 215 220  
 Asn Val Val Ile Asn Gly Asn Ala His Pro His His Leu His His His  
 225 230 235 240  
 His Gln Ile His His Gly His His Leu Gln His Gly His His His Pro  
 245 250 255  
 Ser His Val Ala Val Ala Ser Ala Ser Ile Thr Gly Gly Pro Pro Ser  
 260 265 270  
 Ser Pro Val Ser Arg Lys Leu Ser Thr Thr Gly Ser Ser Asp Ser Ile  
 275 280 285  
 Thr Pro Val Ala Pro Thr Ser Ala Val Ser Ser Ser Gly Ser Pro Ala



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      290              295              300
Ser Val Met Thr Asn Met Arg Ala Pro Ser Thr Thr Gly Gly Ile Gly
305              310              315              320
Ile Asn Ser Val Thr Gly Thr Ser Thr Val Asn Asn Val Asn Ile Thr
      325              330              335
Ala Val Gly Ser Phe Asn Ser
      340

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<210> 2861  
 <211> 756  
 <212> DNA  
 <213> Homo sapiens

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<400> 2861
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gaccttttctt tccattcacc ttcactggat cttgtttctg aagcttttagc gggtatcaac
120
aatgggaaca agggccctcc agttggetca aggataagca tgccaaccac aaagcctcgt
180
ccaggactga gagaagaaaa attagcaagt atcatgagta agctgccact agctactccc
240
aaaaaactag attctactca gactacacat tcttcaagtc ttattgctgg tcacacaggg
300
ccagtaccaa agaaacccca ggatttagct catactggca tctcttcagg cettattgct
360
ggttcttcca ttcagaaccc taaagtttct ttagaacctt tgccagccag gctacttcaa
420
caaggacttc agagggtcaag ccagattcac acttcttctc cttcacagac ccatgtctcc
480
tcttcttccc aagcccaaat tgctgcctct tctcatgctc tgggaacatc cgaggcccaa
540
gatgcttctt cgtaacaca agtaacaaag gtgcaccagc attcagctgt ccagcagaac
600
tatgtgtctc cattacaggc caccatcagt aaatcccaga ccaaccccggt cgtgaagtta
660
agtaataatc cccaactctc ctgttctctc tcacttatta agacttcaga taagccactt
720
atgtaccgcc ttcccttctc taccctcttc acgcgt
756

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<210> 2862  
 <211> 252  
 <212> PRT  
 <213> Homo sapiens

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<400> 2862
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1      5      10      15
Ser Leu Asp Glu Asp Leu Ser Phe His Ser Pro Ser Leu Asp Leu Val
20      25      30
Ser Glu Ala Leu Ala Val Ile Asn Asn Gly Asn Lys Gly Pro Pro Val
35      40      45
Gly Ser Arg Ile Ser Met Pro Thr Thr Lys Pro Arg Pro Gly Leu Arg

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```

      50      55      60
Glu Glu Lys Leu Ala Ser Ile Met Ser Lys Leu Pro Leu Ala Thr Pro
65      70      75      80
Lys Lys Leu Asp Ser Thr Gln Thr Thr His Ser Ser Ser Leu Ile Ala
      85      90      95
Gly His Thr Gly Pro Val Pro Lys Lys Pro Gln Asp Leu Ala His Thr
      100      105      110
Gly Ile Ser Ser Gly Leu Ile Ala Gly Ser Ser Ile Gln Asn Pro Lys
      115      120      125
Val Ser Leu Glu Pro Leu Pro Ala Arg Leu Leu Gln Gln Gly Leu Gln
      130      135      140
Arg Ser Ser Gln Ile His Thr Ser Ser Ser Ser Gln Thr His Val Ser
145      150      155      160
Ser Ser Ser Gln Ala Gln Ile Ala Ala Ser Ser His Ala Leu Gly Thr
      165      170      175
Ser Glu Ala Gln Asp Ala Ser Ser Leu Thr Gln Val Thr Lys Val His
      180      185      190
Gln His Ser Ala Val Gln Gln Asn Tyr Val Ser Pro Leu Gln Ala Thr
      195      200      205
Ile Ser Lys Ser Gln Thr Asn Pro Val Val Lys Leu Ser Asn Asn Pro
      210      215      220
Gln Leu Ser Cys Ser Ser Ser Leu Ile Lys Thr Ser Asp Lys Pro Leu
225      230      235      240
Met Tyr Arg Leu Pro Leu Ser Thr Pro Phe Thr Arg
      245      250

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&lt;210&gt; 2863

&lt;211&gt; 711

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2863

```

naccgacgtc gaatatccat gcagcgcgct ccgggagctg cacggngctg cgtggaaaga
60
gcgccgagcg gtggcgctcgt tgcgcgcccc tcctcgtcgg gaagaatcgt ttggtctcct
120
gccgtgcccg gaatcccagt cagaagttcc agcctgccac tgttctctga tgccatgcca
180
gcaccaactc aactgttttt tcctctcacc cgtaactgtg aactgagcag gatctatggc
240
actgcatgtt actgccacca caaacatctc tgttggttct catcgtacat tcctcagagt
300
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His	Leu	Phe	Ser	Phe	Met	Val	Leu	Ala	Leu	Asn	Val	Val	Thr	Val	Ala
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Thr	Ile	Thr	Val	Arg	His	Phe	Val	Asn	Gln	Arg	Ala	Asp	Tyr	Lys	Tyr
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Ala	Lys	Ala	Ser	Gly	Lys	Lys	Leu	Gln	Lys	Val	Thr	Leu	Lys	Val	Ser
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<212> PRT

<213> Homo sapiens

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&lt;213&gt; Homo sapiens

&lt;400&gt; 2871

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&lt;210&gt; 2872

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2872

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 Phe His Thr Gly Gln Ala Glu Lys Ile Leu Pro Gly Leu Leu Lys Ser  
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<212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2874

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 Lys Leu Lys Ala Ser Ser Arg Thr Ser Ala Leu Leu Ser Gly Phe Ala  
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 Met Val Ala Met Val Glu Val Gln Leu Asp Ala Asp His Asp Tyr Pro  
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 Pro Gly Leu Leu Ile Ala Phe Ser Ala Cys Thr Thr Val Leu Val Ala  
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 Gly His Leu Phe Ala Leu Met Ile Ser Thr Cys Ile Leu Pro Asn Ile  
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 Glu Ala Val Ser Asn Cys Thr Ile Ser Thr Arg Lys Glu Ser Pro His  
 100 105 110  
 Glu Arg Met His Arg His Ile Glu Leu Ala Trp Ala Phe Ser Thr Val  
 115 120 125  
 Ile Gly Thr Leu Leu Phe Leu Ala Glu Val Val Leu Leu Cys Trp Val  
 130 135 140  
 Lys Phe Leu Pro Leu Lys Lys Gln Pro Gly Gln Pro Arg Pro Thr Ser  
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 Lys Pro Pro Ala Ser Gly Ala Ala Ala Asn Val Ser Thr Ser Gly Ile  
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 Thr Pro Gly Gln Ala Ala Ala Ile Ala Ser Thr Thr Ile Met Val Pro  
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 Phe Gly Leu Ile Phe Ile Val Phe Ala Val His Phe Tyr Arg Ser Leu  
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 Val Ser His Lys Thr Asp Arg Gln Phe Gln Glu Leu Asn Glu Leu Ala  
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&lt;210&gt; 2875

&lt;211&gt; 593

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2875

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 Phe Ser Tyr Lys Asp Glu Glu Asn Gly Asn Arg Gly Gly Lys Gln Arg  
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 Asn Arg Leu Glu Pro Met Asp Thr Ile Phe Val Lys Gln Val Lys Glu  
 100 105 110  
 Gly Gly Pro Ala Phe Glu Ala Gly Leu Cys Thr Gly Asp Arg Ile Ile  
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 Lys Asp Glu Asp Ile Leu Gln Val Val Ser Phe Ile Tyr Ser Tyr Met  
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Tyr Lys Asn Leu	Ala Phe Tyr Trp	Ile Leu Lys Ala	Gly His Met Val		
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&lt;210&gt; 2879

&lt;211&gt; 1352

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2879

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&lt;210&gt; 2880

&lt;211&gt; 376

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2880

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 2820  
 cctacagaca gccagtctcc acttgccctc cctctggatg tatctggtae gggaagtggg  
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&lt;210&gt; 2882

&lt;211&gt; 96

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2882

Gly Gln Gly Ala Arg Ser Pro Gln Cys Arg Ala Ala Cys Arg Gly Pro  
 1 5 10 15  
 Arg Val Lys Lys Ala Ser Glu Gly Gly Phe Cys Ser Leu Arg Leu Trp  
 20 25 30  
 Val His Pro Gln His Phe Leu Arg Lys Arg Thr Pro Ala Gln Ala Gly  
 35 40 45  
 Pro Ala Ile Ser Pro Leu Pro Thr Asp Ser Gln Ser Pro Leu Ala Ser  
 50 55 60  
 Pro Leu Asp Val Ser Gly Gln Gly Ser Gly Gly Cys Ser Phe Asp Lys  
 65 70 75 80  
 Lys Lys Lys Lys Phe Tyr Val Phe Lys Leu Leu Leu Gln Asp Phe Asn  
 85 90 95

&lt;210&gt; 2883

&lt;211&gt; 516

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2883

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 240  
 gggcaccgct actcaccgga gtacgcccc agccctctcc actgtagcca cccctgggc  
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<210> 2884  
 <211> 172  
 <212> PRT  
 <213> Homo sapiens

<400> 2884  
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 35 40 45  
 Met Ser Pro Leu Asp Val Leu Glu Pro Glu Gln Thr Phe Phe Ser Ser  
 50 55 60  
 Pro Cys Gln Glu Glu His Gly His Pro Arg Arg Ile Pro His Leu Pro  
 65 70 75 80  
 Gly His Pro Tyr Ser Pro Glu Tyr Ala Pro Ser Pro Leu His Cys Ser  
 85 90 95  
 His Pro Leu Gly Ser Leu Ala Leu Gly Gln Ser Pro Gly Val Ser Met  
 100 105 110  
 Met Ser Pro Val Pro Gly Cys Pro Pro Ser Pro Ala Tyr Tyr Ser Pro  
 115 120 125  
 Ala Thr Tyr His Pro Leu His Ser Asn Leu Gln Ala His Leu Gly Gln  
 130 135 140  
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 145 150 155 160  
 Asn Gln Gly Glu Leu Leu Gly Asp Met Asp Arg Asn  
 165 170

<210> 2885  
 <211> 807  
 <212> DNA  
 <213> Homo sapiens

<400> 2885  
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 120  
 aagcaaaagg aaactataaa agcctttcta aagaaactag aagccctcat agcaagcaat  
 180  
 gacaatgccca ataaaacctg caagatgatg ttagccacag aagaaacctc tcctgacctt  
 240  
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gcccagcca gagaagagca ggttgaaggg acaattaage gccttgaaga attttacagc  
 360  
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 480  
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 807

<210> 2886

<211> 269

<212> PRT

<213> Homo sapiens

<400> 2886

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			20					25					30		
Gly	Arg	Asp	Ala	Glu	Thr	Leu	Gln	Lys	Gln	Lys	Glu	Thr	Ile	Lys	Ala
			35				40					45			
Phe	Leu	Lys	Lys	Leu	Glu	Ala	Leu	Ile	Ala	Ser	Asn	Asp	Asn	Ala	Asn
			50			55				60					
Lys	Thr	Cys	Lys	Met	Met	Leu	Ala	Thr	Glu	Glu	Thr	Ser	Pro	Asp	Leu
65					70					75				80	
Val	Gly	Ile	Lys	Arg	Asp	Leu	Glu	Ala	Leu	Ser	Lys	Gln	Cys	Asn	Lys
			85						90					95	
Leu	Leu	Asp	Arg	Ala	Gln	Ala	Arg	Glu	Glu	Gln	Val	Glu	Gly	Thr	Ile
			100					105					110		
Lys	Arg	Leu	Glu	Glu	Phe	Tyr	Ser	Lys	Leu	Lys	Glu	Phe	Ser	Ile	Leu
			115				120					125			
Leu	Gln	Lys	Ala	Glu	Glu	His	Glu	Glu	Ser	Gln	Gly	Pro	Val	Gly	Met
			130			135					140				
Glu	Thr	Glu	Thr	Ile	Asn	Gln	Gln	Leu	Asn	Met	Phe	Lys	Val	Phe	Gln
145					150					155				160	
Lys	Glu	Glu	Ile	Glu	Pro	Leu	Gln	Gly	Lys	Gln	Gln	Asp	Val	Asn	Trp
			165						170					175	
Leu	Gly	Gln	Gly	Leu	Ile	Gln	Ser	Ala	Ala	Lys	Ser	Thr	Ser	Thr	Gln
			180				185					190			
Gly	Leu	Glu	His	Asp	Leu	Asp	Asp	Val	Asn	Ala	Arg	Trp	Lys	Thr	Leu
			195				200					205			
Asn	Lys	Lys	Val	Ala	Gln	Arg	Ala	Ala	Gln	Leu	Gln	Glu	Ala	Leu	Leu
			210			215					220				
His	Cys	Gly	Arg	Phe	Gln	Asp	Ala	Leu	Glu	Ser	Leu	Leu	Ser	Trp	Met

225					230					235				240	
Val	Asp	Thr	Glu	Glu	Leu	Val	Ala	Asn	Gln	Lys	Pro	Pro	Ser	Ala	Glu
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Phe	Lys	Val	Val	Lys	Asp	Lys	Ile	Gln	Glu	Gln	Lys	Leu			
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<210> 2887
<211> 1945
<212> DNA
<213> Homo sapiens
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720
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1020
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1260

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 1380  
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 1440  
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 1920  
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 1945

&lt;210&gt; 2888

&lt;211&gt; 315

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2888

Met Met Lys Pro Ser Trp Leu Ser Arg Thr Glu Phe Ser Lys Arg Leu  
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 Leu Cys Arg Thr Leu Trp Cys Gln Ser Gly Trp Ser Ser Arg Ser Tyr  
 20 25 30  
 Thr Arg Ser Met Leu Lys Met Thr Thr Ser Ile Asn Arg Arg Ser Arg  
 35 40 45  
 Thr Ser Thr Lys Ser Thr Arg Thr Ser Ala Arg Pro Gly Leu Thr Ala  
 50 55 60  
 Thr Val Ser Ile Gly Leu Ser Asp Ser Pro Thr Trp Arg His Cys Trp  
 65 70 75 80  
 Met Thr Ala Arg Ser Cys Ser Gly Glu Lys Gly Gly His Trp Ala Pro  
 85 90 95  
 Arg Gln Val Gly Val Tyr Leu Leu Pro Gly Arg Val Gly Cys Val Ser  
 100 105 110  
 Ser Arg Val Ser Pro Ser Phe Pro Gly Asp Gly Leu Asp Ser Gly Leu  
 115 120 125  
 Ala Arg Arg Gly Ser Ala Val Ser Ala Leu Ala Ser Gly Leu Val Glu  
 130 135 140  
 Glu Pro Met Leu Gly Pro Pro Phe His Pro Thr Pro Arg Phe Lys Ala  
 145 150 155 160  
 Val Ser Ala Lys Ser Lys Glu Asp Leu Val Ser Gln Gly Phe Thr Glu  
 165 170 175  
 Phe Thr Ile Glu Asp Phe His Asn Thr Phe Met Asp Leu Ile Glu Gln



	180		185		190										
Val	Glu	Lys	Gln	Thr	Ser	Val	Ala	Asp	Leu	Leu	Ala	Ser	Phe	Asn	Asp
	195						200					205			
Gln	Ser	Thr	Ser	Asp	Tyr	Leu	Val	Val	Tyr	Leu	Arg	Leu	Leu	Thr	Ser
	210						215					220			
Gly	Tyr	Leu	Gln	Arg	Glu	Ser	Lys	Phe	Phe	Glu	His	Phe	Ile	Glu	Gly
	225					230				235				240	
Gly	Arg	Thr	Val	Lys	Glu	Phe	Cys	Gln	Gln	Glu	Val	Glu	Pro	Met	Cys
			245					250						255	
Lys	Glu	Ser	Asp	His	Ile	His	Ile	Ile	Ala	Leu	Ala	Gln	Ala	Leu	Ser
	260							265						270	
Val	Ser	Ile	Gln	Val	Glu	Tyr	Met	Asp	Arg	Gly	Glu	Gly	Gly	Thr	Thr
	275						280					285			
Asn	Pro	His	Ile	Phe	Pro	Glu	Gly	Ser	Glu	Pro	Lys	Val	Tyr	Leu	Leu
	290					295					300				
Tyr	Arg	Pro	Gly	His	Tyr	Asp	Ile	Leu	Tyr	Lys					
	305				310				315						

<210> 2889  
 <211> 614  
 <212> DNA  
 <213> Homo sapiens

<400> 2889  
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 ccggaggtgc agctaaaggc caccaaggca gaacaggcag aagggatgga atttggttc  
 180  
 aagatgcccc agatgacat gcccaagcta gggagggcag agtccccatc acgtggcaag  
 240  
 ccaggcgagg cgggtgctga ggtctcaggg aagctggtaa cacttccctg tctgcagcca  
 300  
 gaggtggatg gtgaggtc tgtgggtgtc ccctctctca ctctgccttc agtggagcta  
 360  
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 420  
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 480  
 tctgttgaaa ttgtcacccc acagctgccc gccgtggaaa ttgaggaagg gcggctggag  
 540  
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 ggaccaaagg tggc  
 614

<210> 2890  
 <211> 204  
 <212> PRT  
 <213> Homo sapiens

<400> 2890  
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Pro Glu Met Gln Val Xaa Glu Val Pro Asp Val His Leu Pro Lys Xaa
20           25           30
Pro Glu Val Lys Leu Pro Arg Ala Pro Glu Val Gln Leu Lys Ala Thr
35           40           45
Lys Ala Glu Gln Ala Glu Gly Met Glu Phe Gly Phe Lys Met Pro Lys
50           55           60
Met Thr Met Pro Lys Leu Gly Arg Ala Glu Ser Pro Ser Arg Gly Lys
65           70           75           80
Pro Gly Glu Ala Gly Ala Glu Val Ser Gly Lys Leu Val Thr Leu Pro
85           90           95
Cys Leu Gln Pro Glu Val Asp Gly Glu Ala His Val Gly Val Pro Ser
100          105          110
Leu Thr Leu Pro Ser Val Glu Leu Asp Leu Pro Gly Ala Leu Gly Leu
115          120          125
Gln Gly Gln Val Pro Ala Ala Lys Met Gly Lys Gly Glu Arg Ala Glu
130          135          140
Gly Pro Glu Val Ala Ala Gly Val Arg Glu Val Gly Phe Arg Val Pro
145          150          155          160
Ser Val Glu Ile Val Thr Pro Gln Leu Pro Ala Val Glu Ile Glu Glu
165          170          175
Gly Arg Leu Glu Met Ile Glu Thr Lys Val Lys Pro Ser Ser Lys Phe
180          185          190
Ser Leu Pro Lys Phe Gly Leu Ser Gly Pro Lys Val
195          200

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&lt;210&gt; 2891

&lt;211&gt; 565

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2891

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&lt;210&gt; 2892

<211> 90  
 <212> PRT  
 <213> Homo sapiens

<400> 2892  
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 Ser Thr Ser Tyr Arg Lys Ala Leu Pro Ile Leu Arg Pro Ser Ser Arg  
 35 40 45  
 Arg Glu Ala Gly Pro Leu His His Ile Asp Leu Arg Arg Cys Phe Ser  
 50 55 60  
 Arg Leu Gly Arg Gly Ala Asp Phe Ala Val Cys Ala Lys Glu Pro Val  
 65 70 75 80  
 Ser Asp Asn Pro Ile Phe Leu Leu Ile Thr  
 85 90

<210> 2893  
 <211> 2270  
 <212> DNA  
 <213> Homo sapiens

<400> 2893  
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 120  
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2270

&lt;210&gt; 2894

&lt;211&gt; 490

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2894

Met Phe Ile Ser Leu Gly Gly Ala Pro Asp Arg Gln Ser Leu Phe Pro

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20           25           30
Gln Val Ser Val Ser Leu His Pro Gly Thr Gly Leu Phe Ser Pro Phe
35           40           45
Cys Ser Val Pro Leu Trp Cys Ile Tyr Phe Leu Ser Phe Cys Ile Val
50           55           60
Leu Ser Leu Pro Ser Ala Ser Leu His Leu Cys Leu Ser Cys Leu His
65           70           75           80
Phe Leu Asn Leu Asp Cys Pro Cys Leu Phe Leu Cys His Ser Leu Ser
85           90           95
Ser Pro Ser Val Cys Gly Ser Ala Ser Leu Ser His Ser Pro Tyr Asn
100          105          110
Trp Pro Leu Pro Ala Gln Thr Phe Leu Asp Glu Leu His Glu Thr Gly
115          120          125
Gln Leu His Ser Met Ser Thr Trp Met Glu Leu Tyr Pro Ala Val Ser
130          135          140
Thr Asp Val Arg Phe Ala Asn Met Leu Gly Gln Pro Gly Ser Thr Pro
145          150          155          160
Leu Asp Leu Phe Lys Phe Tyr Val Glu Glu Leu Lys Ala Arg Phe His
165          170          175
Asp Glu Lys Lys Ile Ile Lys Asp Ile Leu Lys Asp Arg Gly Phe Cys
180          185          190
Val Glu Val Asn Thr Ala Phe Glu Asp Phe Ala His Val Ile Ser Phe
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Asp Lys Arg Ala Ala Ala Leu Asp Ala Gly Asn Ile Lys Leu Thr Phe
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Asn Ser Leu Leu Glu Lys Ala Glu Ala Arg Glu Arg Glu Arg Glu Lys
225          230          235          240
Glu Glu Ala Arg Arg Met Arg Arg Arg Glu Ala Ala Phe Arg Ser Met
245          250          255
Leu Arg Gln Ala Val Pro Ala Leu Glu Leu Gly Thr Ala Trp Glu Glu
260          265          270
Val Arg Glu Arg Phe Val Cys Asp Ser Ala Phe Glu Gln Ile Thr Leu
275          280          285
Glu Ser Glu Arg Ile Arg Leu Phe Arg Glu Phe Leu Gln Val Leu Glu
290          295          300
Thr Glu Cys Gln His Leu His Thr Lys Gly Arg Lys His Gly Arg Lys
305          310          315          320
Gly Lys Lys His His His Lys Arg Ser His Ser Pro Ser Gly Ser Glu
325          330          335
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Arg Arg Arg Asn Pro Ser Glu Ser Gly Ser Glu Pro Ser Ser Ser Leu
355          360          365
Asp Ser Val Glu Ser Gly Gly Ala Ala Leu Gly Gly Arg Gly Ser Pro
370          375          380
Ser Ser His Leu Leu Gly Ala Asp His Gly Leu Arg Lys Ala Lys Lys
385          390          395          400
Pro Lys Lys Lys Thr Lys Lys Arg Arg His Lys Ser Asn Ser Pro Glu
405          410          415
Ser Glu Thr Asp Pro Glu Glu Lys Ala Gly Lys Glu Ser Asp Glu Lys
420          425          430
Glu Gln Glu Gln Asp Lys Asp Arg Glu Leu Gln Gln Ala Glu Leu Pro

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Asn Arg Ser Pro Gly Phe Gly Ile Lys Lys Glu Lys Thr Gly Trp Asp
  450              455              460
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      485              490

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<210> 2895  
 <211> 697  
 <212> DNA  
 <213> Homo sapiens

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<210> 2896  
 <211> 174  
 <212> PRT  
 <213> Homo sapiens

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<400> 2896
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 20          25          30
Pro Leu Arg Gly Pro Ser Ala Thr Ser Ser Cys Arg Gly Gly Asn Ala
 35          40          45
Pro Gln Gly Leu Gln Lys Gly Gly Gly Glu Ala Pro Val Leu Leu Leu
 50          55          60
Gln Glu Leu Ala Gln Asp Ala Val Ala Pro Ala Val Ala Arg Arg Ser

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65          70          75          80
Ala Pro Ala Pro Cys Ser Asn Arg Leu Arg Ser Pro Ser Pro Pro Ser
      85          90          95
Leu Pro Pro Asp Arg Pro Arg Pro Pro Ala Arg Arg His Ser Phe Arg
      100          105          110
Gly Pro Ala Leu Arg Ser Gly Pro Pro Leu Pro Pro Pro Pro Arg Arg
      115          120          125
Pro Leu Leu Arg Pro Pro Val Ala Ala Ala Leu Pro Pro Gln Pro Ala
      130          135          140
Pro Ser Leu Pro Ala Ser Arg Ala His Ser Cys Pro Gly Arg Pro Arg
      145          150          155          160
Leu Gly Gly Val Glu Gln Pro Leu Glu Val Leu Gly Asp Ala
      165          170

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&lt;210&gt; 2897

&lt;211&gt; 3184

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2897

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1020

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2640



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<211> 933

<212> PRT

<213> Homo sapiens

<400> 2898

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 Asn Glu Cys Val Gln Cys Glu Phe Asn Phe Ile Asn Thr Gly Lys Phe  
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 Thr Phe Ser Phe Gln Ala Gln Leu Cys Gly Ser Lys Thr Leu Leu Gln  
 50 55 60  
 Tyr Leu Glu Phe Ser Pro Ile Asp Ser Thr Val Asp Val Gly Gln Ser  
 65 70 75 80  
 Val His Ala Thr Leu Ser Phe Gln Pro Leu Lys Lys Cys Val Leu Thr  
 85 90 95  
 Asp Leu Glu Leu Ile Ile Lys Ile Ser His Gly Pro Thr Phe Met Cys  
 100 105 110  
 Asn Ile Ser Gly Cys Ala Val Ser Pro Ala Ile His Phe Ser Phe Thr  
 115 120 125  
 Ser Tyr Asn Phe Gly Thr Cys Phe Ile Tyr Gln Ala Gly Met Pro Pro  
 130 135 140  
 Tyr Lys Gln Thr Leu Val Ile Thr Asn Lys Glu Glu Thr Pro Met Ser  
 145 150 155 160  
 Ile Asp Cys Leu Tyr Thr Asn Thr Thr His Leu Glu Val Asn Ser Arg  
 165 170 175  
 Val Asp Val Val Lys Pro Gly Asn Thr Leu Glu Ile Pro Ile Thr Phe  
 180 185 190  
 Tyr Pro Arg Glu Ser Ile Asn Tyr Gln Glu Leu Ile Pro Phe Glu Ile  
 195 200 205  
 Asn Gly Leu Ser Gln Gln Thr Val Glu Ile Lys Gly Lys Gly Thr Glu

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      210              215              220
Met Lys Ile Leu Val Leu Asp Pro Ala Asn Arg Ile Val Lys Leu Gly
225              230              235              240
Ala Val Leu Pro Gly Gln Val Val Lys Arg Thr Val Ser Ile Met Asn
      245              250              255
Asn Ser Leu Ala Gln Leu Thr Phe Asn Gln Ser Ile Leu Phe Thr Ile
      260              265              270
Pro Glu Leu Gln Glu Pro Lys Val Leu Thr Leu Ala Pro Phe His Asn
      275              280              285
Ile Thr Leu Lys Pro Lys Glu Val Cys Lys Leu Glu Val Ile Phe Ala
      290              295              300
Pro Lys Lys Arg Val Pro Phe Ser Glu Glu Val Phe Met Glu Cys
305              310              315              320
Met Gly Leu Leu Arg Pro Leu Phe Leu Leu Ser Gly Cys Cys Gln Ala
      325              330              335
Leu Glu Ile Ser Leu Asp Gln Glu His Ile Pro Phe Gly Pro Val Val
      340              345              350
Tyr Gln Thr Gln Ala Thr Arg Arg Ile Leu Met Leu Asn Thr Gly Asp
      355              360              365
Val Gly Ala Arg Phe Lys Trp Asp Ile Lys Lys Phe Glu Pro His Phe
      370              375              380
Ser Ile Ser Pro Glu Glu Gly Tyr Ile Thr Ser Gly Met Glu Val Ser
385              390              395              400
Phe Glu Val Thr Tyr His Pro Thr Glu Val Gly Lys Glu Ser Leu Cys
      405              410              415
Lys Asn Ile Leu Cys Tyr Ile Gln Gly Gly Ser Pro Leu Ser Leu Thr
      420              425              430
Leu Ser Gly Val Cys Val Gly Pro Pro Ala Val Lys Glu Val Val Asn
      435              440              445
Phe Thr Cys Gln Val Arg Ser Lys His Thr Gln Thr Ile Leu Leu Ser
      450              455              460
Asn Arg Thr Asn Gln Thr Trp Asn Leu His Pro Ile Phe Glu Gly Glu
465              470              475              480
His Trp Glu Gly Pro Glu Phe Ile Thr Leu Glu Ala His Gln Gln Asn
      485              490              495
Lys Pro Tyr Glu Ile Thr Tyr Arg Pro Arg Thr Met Asn Leu Glu Asn
      500              505              510
Arg Lys His Gln Gly Thr Leu Phe Pro Leu Pro Asp Gly Thr Gly
      515              520              525
Trp Leu Tyr Ala Leu His Gly Thr Ser Glu Leu Pro Lys Ala Val Ala
      530              535              540
Asn Ile Tyr Arg Glu Val Pro Cys Lys Thr Pro Tyr Thr Glu Leu Leu
545              550              555              560
Pro Ile Thr Asn Trp Leu Asn Lys Pro Gln Arg Phe Arg Val Ile Val
      565              570              575
Glu Ile Leu Lys Pro Glu Lys Pro Asp Leu Ser Ile Thr Met Lys Gly
      580              585              590
Leu Asp Tyr Ile Asp Val Leu Ser Gly Ser Lys Lys Asp Tyr Lys Leu
      595              600              605
Asn Phe Phe Ser His Lys Glu Gly Thr Tyr Ala Ala Lys Val Ile Phe
      610              615              620
Arg Asn Glu Val Thr Asn Glu Phe Leu Tyr Tyr Asn Val Ser Phe Arg
625              630              635              640
Val Ile Pro Ser Gly Ile Ile Lys Thr Ile Glu Met Val Thr Pro Val

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645 650 655  
 Arg Gln Val Ala Ser Ala Ser Ile Lys Leu Glu Asn Pro Leu Pro Tyr  
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 Ser Val Thr Phe Ser Thr Glu Cys Arg Met Pro Asp Ile Ala Leu Pro  
 675 680 685  
 Ser Gln Phe Val Val Pro Ala Asn Ser Glu Gly Thr Phe Ser Phe Glu  
 690 695 700  
 Phe Gln Pro Leu Lys Ala Gly Glu Thr Phe Gly Arg Leu Thr Leu His  
 705 710 715 720  
 Asn Thr Asp Leu Gly Tyr Tyr Gln Tyr Glu Leu Tyr Leu Lys Ala Thr  
 725 730 735  
 Pro Ala Leu Pro Glu Lys Pro Val His Phe Gln Thr Val Leu Gly Ser  
 740 745 750  
 Ser Gln Ile Ile Leu Val Lys Phe Ile Asn Tyr Thr Arg Gln Arg Thr  
 755 760 765  
 Glu Tyr Tyr Cys Arg Thr Asp Cys Thr Asp Phe His Ala Glu Lys Leu  
 770 775 780  
 Ile Asn Ala Ala Pro Gly Gly Gln Gly Thr Glu Ala Ser Val Glu  
 785 790 795 800  
 Val Leu Phe Glu Pro Ser His Leu Gly Glu Thr Lys Gly Ile Leu Ile  
 805 810 815  
 Leu Ser Ser Leu Ala Gly Gly Glu Tyr Ile Ile Pro Leu Phe Gly Met  
 820 825 830  
 Ala Leu Pro Pro Lys Pro Gln Gly Pro Phe Ser Ile Arg Ala Gly Tyr  
 835 840 845  
 Ser Ile Ile Ile Pro Phe Lys Asn Val Phe Tyr His Met Val Thr Phe  
 850 855 860  
 Ser Ile Ile Val Asp Asn Pro Ala Phe Thr Ile Arg Ala Gly Glu Ser  
 865 870 875 880  
 Val Arg Pro Lys Lys Ile Asn Asn Ile Thr Val Ser Phe Glu Gly Asn  
 885 890 895  
 Pro Ser Gly Ser Lys Thr Pro Ile Thr Thr Lys Leu Thr Val Ser Cys  
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 Pro Pro Gly Glu Gly Ser Glu Thr Gly Val Lys Trp Val Tyr Tyr Leu  
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 Lys Gly Ile Thr Leu  
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 <211> 876  
 <212> DNA  
 <213> Homo sapiens

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 180  
 gactagtctg aattgagaaa tactcccaac aggggcacaa aacgtccccg ggatgatgag  
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 300

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 720  
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<210> 2900

<211> 189

<212> PRT

<213> Homo sapiens

<400> 2900

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Ile	Ile	Asp	Arg	Asp	Gly	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Pro	Leu
		20					25				30			
Asp	Glu	Ser	Ser	Val	Lys	Lys	Met	Ile	Leu	Thr	Phe	Glu	Lys	Arg
	35					40					45			Ser
Tyr	Lys	Asn	Gln	Glu	Leu	Arg	Ile	Lys	Phe	Pro	Asp	Asn	Pro	Glu
	50					55				60				Lys
Phe	Met	Glu	Ser	Glu	Leu	Asp	Leu	Asn	Asp	Ile	Ile	Gln	Glu	Met
	65				70					75				His
Val	Val	Ala	Thr	Met	Pro	Asp	Leu	Tyr	His	Leu	Leu	Val	Glu	Leu
				85					90					Asn
Ala	Val	Gln	Ser	Leu	Leu	Gly	Leu	Leu	Gly	His	Asp	Asn	Thr	Asp
			100						105				110	Val
Ser	Ile	Ala	Val	Val	Asp	Leu	Leu	Gln	Glu	Leu	Thr	Asp	Ile	Asp
			115				120					125		Thr
Leu	His	Glu	Ser	Glu	Glu	Gly	Ala	Glu	Val	Leu	Ile	Asp	Ala	Leu
			130				135					140		Val
Asp	Gly	Gln	Val	Val	Ala	Leu	Leu	Val	Gln	Asn	Leu	Glu	Arg	Leu
					150					155				Asp
Glu	Ser	Val	Lys	Glu	Glu	Ala	Asp	Gly	Val	His	Asn	Thr	Leu	Ala
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Val	Glu	Asn	Met	Ala	Glu	Phe	Arg	Pro	Glu	Met	Cys	Thr		
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<210> 2901

<211> 756

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2901

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&lt;210&gt; 2902

&lt;211&gt; 158

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2902

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			20					25				30			
Glu	Ser	Leu	Glu	Glu	Glu	Ala	Leu	Asp	Pro	Leu	Gly	Ile	Met	Arg	
		35				40					45				
Ser	Lys	Lys	Pro	Lys	Lys	His	Pro	Lys	Val	Ala	Val	Lys	Ala	Lys	Pro
		50				55				60					
Ser	Pro	Arg	Leu	Thr	Ile	Phe	Asp	Glu	Glu	Val	Asp	Pro	Asp	Glu	Gly
65				70				75						80	
Leu	Phe	Gly	Pro	Gly	Arg	Lys	Leu	Ser	Pro	Gln	Asp	Pro	Ser	Glu	Asp
			85					90						95	
Val	Ser	Ser	Met	Asp	Pro	Leu	Lys	Leu	Phe	Asp	Asp	Pro	Asp	Leu	Gly
			100					105						110	
Gly	Ala	Ile	Pro	Leu	Gly	Asp	Ser	Leu	Leu	Leu	Pro	Ala	Ala	Cys	Glu
		115				120					125				
Ser	Gly	Gly	Pro	Thr	Pro	Ser	Leu	Ser	His	Arg	Asp	Ala	Ser	Lys	Glu

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<210> 2903  
 <211> 542  
 <212> DNA  
 <213> Homo sapiens

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 420  
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 542

<210> 2904  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

<400> 2904  
 Lys Leu Met Phe Ser Leu Tyr Pro Arg Leu Arg His Leu Gly Leu Gly  
 1 5 10 15  
 Lys Glu Gly Ile Thr Thr Tyr Phe Ser Gly Asn Cys Thr Met Glu Asp  
 20 25 30  
 Ala Lys Leu Ala Gln Asp Phe Leu Asp Ser Gln Asn Leu Ser Ala Tyr  
 35 40 45  
 Asn Thr Arg Leu Phe Lys Glu Val Asp Gly Glu Gly Lys Pro Tyr Tyr  
 50 55 60  
 Glu Val Arg Leu Ala Ser Val Leu Gly Ser Glu Pro Ser Leu Asp Ser  
 65 70 75 80  
 Glu Val Thr Ser Lys Leu Lys Ser Tyr Glu Phe Arg Gly Ser Pro Phe  
 85 90 95  
 Gln Val Thr Arg Gly Asp Tyr Ala Pro Ile Leu Gln Lys Val Val Glu  
 100 105 110  
 Gln Leu Glu Lys Ala Lys Ala Tyr Ala Ala Asn Ser His Gln Gly Gln  
 115 120 125  
 Met Leu Ala Gln Tyr Ile Glu Ser Phe Thr Gln Gly Ser Ile Glu Ala

```

      130              135              140
His Lys Arg Gly Ser Arg Phe Trp Ile Gln Asp Lys Gly Pro His Arg
145              150              155              160
Gly Glu Val Arg Arg Gln Leu His Pro Thr Cys Pro Leu Leu Pro Ala
      165              170              175
Pro Pro Ser Arg
      180

```

<210> 2905  
 <211> 814  
 <212> DNA  
 <213> Homo sapiens

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<400> 2905
tttcatatc ccagttttgt ttatttggga acatttactc ttgtggataa cagaatacca
60
gtcacaagat ccttcttctg tattacaaat tctgccactt tgtttcagaa ctgggtatca
120
ggattcctcc tctgcccagg tttctgctgt ccccccaaaa gaaagacatg tagctgggca
180
tggtggtaca catctgtggt ccagttact caggaggctg aggcaggagg attgcttgag
240
ccaggtgtt caaggttgca gtgggctgtg aatgctctac ttcactccag cctgagcaac
300
agagcaagac cccggccctc ttctcgactt tctatccctc ctctcaaca cccttctctt
360
ctggaaatgg gcttcggggg gggttaacaa gcccagggaa acttgcgtgg ccagcatct
420
tccgtccgct gcaggaggag cacacgcccc cggcccgggt cagcaagacg cgagaaagcg
480
gccacgccgg gcgtccggga gctgaggctg gagggcgctt ggagggcagg gcggggccca
540
ggcggcgggg gtgcttatga ccggcgctgg ggggaacttc tggacgtcaa ggggccacta
600
taaagcggca cagtcttgag ccttcgctct tcacctagt cagtgagcgc ccttcgcaa
660
gcctctgtgg aggttaacct tgggggttcg cctccaaatc caggaatgca cctcaaaaat
720
gctcctacac cgtaagaccg tgccttcaa tgcaaagggg actgtgcggc gaggcaccga
780
caagccgtag ccctgagacc actcaaagcc tgca
814

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<210> 2906  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2906
Phe Ser Tyr Pro Ser Phe Val Tyr Leu Gly Thr Phe Thr Leu Val Asp
1      5      10      15
Asn Arg Ile Pro Val Thr Arg Ser Phe Phe Cys Ile Thr Asn Ser Ala
      20      25      30
Thr Leu Phe Gln Asn Trp Val Ser Gly Phe Leu Leu Cys Pro Gly Phe

```

[illegible]

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<210> 2907
<211> 379
<212> DNA
<213> Homo sapiens
```

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<400> 2907
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60
atcagcaggc tgtgatctgc cgaaactcat gacagcggag ctcaatggct gggctttaag
120
aaacagcatc ttcacttttc ccaggctgct ttccaatttc caacactgtc cccaagatta
180
caaaaggcaa ggaattcttc ccttaatggt ggacggctct gagactgtct caccctgggc
240
tcattacact gggaccagct ttaagcttcc ctgttcaacy cggagagctc cacagcccag
300
gacgacagag cagatgatgg cacgacgccc tcaaaaccca gacaggcctt cttggccttg
360
cctggccgat gccaccggt
379

```

```
<210> 2908
<211> 113
<212> PRT
<213> Homo sapiens
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<400> 2908

Met	Thr	Val	Ser	Asp	Arg	Pro	Ser	Ala	Gly	Cys	Asp	Leu	Pro	Lys	Leu
1				5					10					15	
Met	Thr	Ala	Ser	Leu	Asn	Gly	Trp	Val	Leu	Arg	Asn	Ser	Ile	Phe	Thr
			20					25					30		
Phe	Pro	Arg	Leu	Leu	Ser	Asn	Phe	Gln	His	Cys	Pro	Gln	Asp	Tyr	Lys



	35		40		45	
Gly	Lys	Gly	Ile	Leu	Pro	Leu
	50		55		60	
Pro	Trp	Ala	His	Tyr	Thr	Gly
65			70		75	
Arg	Arg	Ala	Pro	Gln	Pro	Arg
			85		90	
Pro	Gln	Asn	Pro	Asp	Arg	Pro
	100		105		110	
Gly						

&lt;210&gt; 2909

&lt;211&gt; 2420

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2909

```

tttttttttt tttaatttat aaaatatcct ttatttattc taaggaacag tcaagcagta
60
gcttttaaaaa aaaaaaaaaa gacacatttt ttgaaagata ttcttagtgt tgtgacctgg
120
cattggggccc ctgtgagcgg gacgggtggct gagaccgcct gctgtggcct tgcgagttct
180
ctgcactcac tggcagggggt ttggtgggaa acgggggaagc tttggcatgg ttctgtccag
240
ttgcttataa tcaagaataa tgagttttga ggtttacaaa gacagaaagt aacatttata
300
cggtcggcat ttgacaaaag attgctgata atatactcat tccaggaagt gtaaaaatgc
360
tttaaaggaa tgataatttg tacttactgt ttatggggac tagatatatt agaattatag
420
catcattatg gggacatagt gtttccctat aaattcagaa attctctggt tgatgtaaaa
480
tcatacttcc tgggttttact taattagtaa agaaataaat aaattagagt aacatttagt
540
caggtagagt tactcctttt tccccttctt tattaataaa ttttattttt agcacaatca
600
tttaccceaaa aagagagttt gagaatgttc gagaatctct accactcggg aaccatgctg
660
gctgttatat cagaaaaatc cataaacata cacagcagcg agctgttttc acaagacttc
720
ctgctaataa acacaacact ttctctcca ctcagatggg agcctcagat gccaaaacgc
780
agatgtgcc actaactata ggctcgtgc taagcagaga aacctatcaa gtttgtccag
840
caaattcgat tgtacagtgg gatggcgtct gctctgcggc cttggacagg gagccactgg
900
tctgtgctgc tgtcccctga ggcaggctga agctgggtggc ccttagaggg caggtaaaat
960
ggttctcatg ggttagaaca taagggtttt gagaaaaaat gcaaaaggtc tcattgaaat
1020
tggaggccta tgtgaatctg ttacatgga ggcatactga gatctcgttc tgtgcttagg
1080

```

tgaactgcag gtctcacgct ggctgcatga cttgggtgccc cctggctggc tgagccactg  
1140  
cctgccacct tctcatacca ttacgtgggg gtctaaagag gacatcatcc ccaaccaaag  
1200  
aatagtgaga gagaaaatcc caaacatttg agacaggggt caaaagcacc cagacgcctt  
1260  
ctgtctcttt ccagttccc atctggctag ggactgtgaa tcagaattca gaatctgtgc  
1320  
tgccctgagg ggacaggcac ccaaatgcaa taaataacac caagctcagg acccagccac  
1380  
tgaccttctt ccaccactgc tgcgggttat tcctcgatgg gaactgaagg atccaagga  
1440  
ggaatccgtt ccgccccaa acctccctgc acaacatcga atgcgggagt ctggctgctg  
1500  
cttctgcaca ggacagagcc tccagtcttt tgcttgagag catcatctat ggcattggact  
1560  
gggaacgcaa tgtgttcaca caaatgcacg acaattgtac atcagcatct ttacaatatt  
1620  
aaaggagtca tatacaagtc tacagccatt gtacacagga tggatgatggc tggggagccc  
1680  
cgccccaccg tctctgcag tttctccacc ggagaacact tggggagctg tcacaaggcc  
1740  
aggggggggc catctttggg cctgtcgtgg ggcaggcagc aggtctgcaa ggactcctca  
1800  
gggccagtcc tcaactggaat caggggtcaa gagcgccagg tctgcctgtg tctgggtctc  
1860  
atcggcaggc tagtgtaaca acgtgaatta aaactgtgca tattcgcatg agaaaactgg  
1920  
agctggggat ggctccctga gctggggacc tagaagacgc tgctgacaga tggggccctt  
1980  
catggtgggg cccttctctg aggtaacgtg cagccctgag gctggtccga acgggaggag  
2040  
acttctccag cagcccaggc gccagtccac acagacagga ctggaagccc ctgggcagca  
2100  
ggtcagggtg cccggggagt gcagcctgag cccccaacgg cagcaaacgt gaaggtctca  
2160  
gggtggttaca gaatcactca gccctcaggc cccaccact ctctctccag cagccctgca  
2220  
gcacacatcc ctgcatctgt cccgagagcc ccagccctgc aggcattctg gcctgaatgc  
2280  
caggcagctg gtccaccctg cagccatgct gcacgtctga ctgagaactg agcaccagat  
2340  
aaagaagcat tggctcttgt cagcctctct gacttttgca gttagggtg catccattta  
2400  
aatatgtaga aaaatagcca  
2420

<210> 2910  
<211> 153  
<212> PRT  
<213> Homo sapiens

<400> 2910  
Met Gly Thr Glu Gly Ser Lys Gly Gly Ile Arg Ser Ala Pro Lys Pro

1	5	10	15
Pro Cys Thr Thr Ser Asn Ala Gly Val Trp Leu Leu Leu Leu His Arg			
	20	25	30
Thr Glu Pro Pro Val Phe Cys Leu Arg Ala Ser Phe Met Ala Trp Thr			
	35	40	45
Gly Asn Ala Met Cys Ser His Lys Cys Thr Thr Ile Val His Gln His			
	50	55	60
Leu Tyr Asn Ile Lys Gly Val Ile Tyr Lys Ser Thr Ala Ile Val His			
	65	70	75
Arg Met Val Met Ala Gly Glu Pro Arg Pro Pro Val Leu Cys Ser Phe			
	85	90	95
Ser Thr Gly Glu His Leu Gly Ser Cys His Lys Ala Arg Gly Gly Pro			
	100	105	110
Ser Leu Gly Leu Ser Trp Gly Arg Gln Gln Val Cys Lys Asp Ser Ser			
	115	120	125
Gly Pro Val Leu Thr Gly Ile Arg Gly Gln Glu Arg Gln Val Cys Leu			
	130	135	140
Cys Leu Gly Leu Ile Gly Arg Leu Val			
145	150		

&lt;210&gt; 2911

&lt;211&gt; 1327

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2911

```

nngcaaggcg gcacgtcctg cccccctgg tgaagaagct gccctgggct tgcgtccta
60
gggtctccag acatgtctga ggtgaagagc cggaagaagt cggggcccaa gggagccctt
120
gctgcggagc ccggaagcgc gagcgagggc ggaagaccc ccgtggcccg gagcagcgga
180
ggcgggggct gggcagaccc ccgaacgtgc ctgagcctgc tgcgtctggg gacgtgcctg
240
ggcctggcct ggtttgtatt tcagcagtca gaaaaatttg caaaggtgga aaaccaatac
300
cagttactga aactagaaac caatgaattc caacaacttc aaagtaaaat cagtttaatt
360
tcagaaaagt ggcagaaatc tgaagctatc atggaacaat tgaagtcttt tcaaataatt
420
gctcatctaa agcgtctaca ggaagaaatt aatgaggtaa aaacttggtc caataggata
480
actgaaaaac aggatatact gaacaacagt ctgacgacgc tttctcaaga cattacaaaa
540
gtagacaaaa gtacaacttc catggcaaaa gatgttggtc tcaagattac aagtgtaaaa
600
acagatatac gacggatttc aggttttagta actgatgtaa tatcattgac agattctgtg
660
caagaactag aaaataaaat agagaaagta gaaaaaata cagtaaaaaa tataggtgat
720
cttctttcaa gcagtattga tcgaacagca acgctccgaa agacagcatc tgaaaattca
780
caaagaatta actctgttaa gaagacgcta accgaactaa agagtgactt cgacaaacat
840

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acagatagat ttctaagctt agaaggtgac agagccaaag ttctgaagac agtgactttt  
 900  
 gcaaatgac taaaaccaa ggtgtataat ctaaagaagg acctttcccg tttagaacca  
 960  
 ttagtaaatg atttaacact acgcattggg agattgggta ccgacttact acaaagagag  
 1020  
 aaagaaattg ctttcttaag tgaaaaaata tctaatttaa caatagtcca agctgagatt  
 1080  
 aaggatatta aagatgaaat agcacacatt tcagatatga attagtttga cattattgag  
 1140  
 attagactaa ggtaattttt ttaatgggac ctctcatgag aagactggta aatcaaaaat  
 1200  
 aatgatattt tggagcaaaa gtcattttat atttaatcct attttgtaca gtaaaaataa  
 1260  
 aactttaaaa caggttgatt ttccaaaata aatatgctaa aacctatttt tgcaacttta  
 1320  
 aaaaaaa  
 1327

&lt;210&gt; 2912

&lt;211&gt; 350

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2912

Met Ser Glu Val Lys Ser Arg Lys Lys Ser Gly Pro Lys Gly Ala Pro  
 1 5 10 15  
 Ala Ala Glu Pro Gly Lys Arg Ser Glu Gly Gly Lys Thr Pro Val Ala  
 20 25 30  
 Arg Ser Ser Gly Gly Gly Gly Trp Ala Asp Pro Arg Thr Cys Leu Ser  
 35 40 45  
 Leu Leu Ser Leu Gly Thr Cys Leu Gly Leu Ala Trp Phe Val Phe Gln  
 50 55 60  
 Gln Ser Glu Lys Phe Ala Lys Val Glu Asn Gln Tyr Gln Leu Leu Lys  
 65 70 75 80  
 Leu Glu Thr Asn Glu Phe Gln Gln Leu Gln Ser Lys Ile Ser Leu Ile  
 85 90 95  
 Ser Glu Lys Trp Gln Lys Ser Glu Ala Ile Met Glu Gln Leu Lys Ser  
 100 105 110  
 Phe Gln Ile Ile Ala His Leu Lys Arg Leu Gln Glu Glu Ile Asn Glu  
 115 120 125  
 Val Lys Thr Trp Ser Asn Arg Ile Thr Glu Lys Gln Asp Ile Leu Asn  
 130 135 140  
 Asn Ser Leu Thr Thr Leu Ser Gln Asp Ile Thr Lys Val Asp Gln Ser  
 145 150 155 160  
 Thr Thr Ser Met Ala Lys Asp Val Gly Leu Lys Ile Thr Ser Val Lys  
 165 170 175  
 Thr Asp Ile Arg Arg Ile Ser Gly Leu Val Thr Asp Val Ile Ser Leu  
 180 185 190  
 Thr Asp Ser Val Gln Glu Leu Glu Asn Lys Ile Glu Lys Val Glu Lys  
 195 200 205  
 Asn Thr Val Lys Asn Ile Gly Asp Leu Leu Ser Ser Ser Ile Asp Arg  
 210 215 220  
 Thr Ala Thr Leu Arg Lys Thr Ala Ser Glu Asn Ser Gln Arg Ile Asn

```

225          230          235          240
Ser Val Lys Lys Thr Leu Thr Glu Leu Lys Ser Asp Phe Asp Lys His
          245          250          255
Thr Asp Arg Phe Leu Ser Leu Glu Gly Asp Arg Ala Lys Val Leu Lys
          260          265          270
Thr Val Thr Phe Ala Asn Asp Leu Lys Pro Lys Val Tyr Asn Leu Lys
          275          280          285
Lys Asp Phe Ser Arg Leu Glu Pro Leu Val Asn Asp Leu Thr Leu Arg
          290          295          300
Ile Gly Arg Leu Val Thr Asp Leu Leu Gln Arg Glu Lys Glu Ile Ala
305          310          315          320
Phe Leu Ser Glu Lys Ile Ser Asn Leu Thr Ile Val Gln Ala Glu Ile
          325          330          335
Lys Asp Ile Lys Asp Glu Ile Ala His Ile Ser Asp Met Asn
          340          345          350

```

```

<210> 2913
<211> 361
<212> DNA
<213> Homo sapiens

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<400> 2913
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atccagcaac tgaggaccaa catccagctt cctgcctgcc tccgtgtcat tggctacctg
120
cgggcgcatt acgtcttcac tgaggctgag ttgaggggtga agtttcttca ggcccagat
180
gcttggtccc ggtccatcct gactgccatt cctaagtatg atccctatct ccatattaca
240
aaaaccatcg agggcctccc gtgtccatct ctttgatata atcaccagat accggggccat
300
cttctcagac gaggaccac tgctgcccc tgccatgggt gagcacactg ggatgagagt
360
g
361

```

```

<210> 2914
<211> 112
<212> PRT
<213> Homo sapiens

```

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<400> 2914
Met Ala Gly Gly Ser Ser Gly Ser Ser Ser Glu Lys Met Ala Arg Tyr
1          5          10          15
Trp Val Met Ile Ser Lys Arg Trp Thr Arg Glu Ala Leu Asp Gly Phe
20          25          30
Cys Asn Met Glu Ile Gly Ile Ile Ile Arg Asn Gly Ser Gln Asp Gly
35          40          45
Pro Glu Pro Ser Ile Ser Gly Leu Lys Lys Leu His Pro Gln Leu Ser
50          55          60
Leu Ser Glu Asp Val His Ala Pro Gln Val Ala Asn Asp Thr Glu Ala
65          70          75          80
Gly Arg Lys Leu Asp Val Gly Pro Gln Leu Leu Asp Gln Leu Ala Gln

```

85 90 95  
 His Gln Leu His Gly Leu Ala His Phe Val His Asp Ala Leu Asp Asp  
 100 105 110  
 <210> 2915  
 <211> 1782  
 <212> DNA  
 <213> Homo sapiens  
 <400> 2915  
 caagaggatc accttaaaca cttagaacc ctcgaaaaa cattagaaaa aatggagaga  
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 caaaaaaggc agcagcaggc agcacagata agactgatcc aagagggtga actcaaagct  
 120  
 tcagctgccg atagagaaat atacttactt agaacttccc ttcacgcaga aagagaacaa  
 180  
 gcgcaacaac ttcacaaact tcttgcatcg aaagaacagg aacacaggaa ggaacttgaa  
 240  
 acaagggagt tttttactga tgctgacttc caggatgcct tagctaaaga aatagccaaa  
 300  
 gaagagaaaa agcatgagca aatgataaaa gaataccaag agaaaattga cgtgttaagc  
 360  
 cagcagtata tggatttaga aaatgaattc cgtattgctt taactgttga agccagaaga  
 420  
 tttcaagatg ttaagatgg ttttgaaaat gttgcaactg agttagcaaa gagcaaacat  
 480  
 gctcttattt gggctcaacg aaaagaaaat gagtcttctt ctttaattaa agatctgacc  
 540  
 tgtatggtta aggaacaaaa aacaaaactg gcagaagttt ctaaatgaa acaagaaaca  
 600  
 gcagcaaatt tacagaatca aatcaacacc cttgaaattt taattgaaga tgacaagcag  
 660  
 aagagtattc aaatagaact tctcaagcac gaaaaagtcc agcttatttc tgagctagca  
 720  
 gccaaaggaat cactaatatt tgggtttaagg acagaaagaa aagtatgggg acatgagctg  
 780  
 gcacaacaag gatcttctct agcccaaaat cgtggaaaat tggagggtca aattgagagt  
 840  
 ttatctagag agaatgaatg tctgcaaag acaaatgaaa gtgatagtg tgcatgaaga  
 900  
 ataaagtga aaatcataga cgaccaaact gaaactatta gaaaattaaa agattgttta  
 960  
 caagaaaaag atgaacacat caaaagatta caagaaaaga tcacagaaat agaaaaatgc  
 1020  
 actcaagaac aacttgatga aaaatcttca caactggatg aggtacttga gaagttggaa  
 1080  
 aggcacaatg aaagaaaaga aaaactaaaa caacagttga aaggaaagga agtagaactt  
 1140  
 gaagaaatca gaaaagctta cagtacactg aatcggaagt ggcattgata aggagaactt  
 1200  
 ctatgtcatc ttgaaacaca agtaaaagaa gtgaaagaaa aatttgaaaa caaggaaaag  
 1260  
 aaacttaag cggaagagaa caaaagtatt gaactacaaa agaattgcaat ggaaaaactt  
 1320

catagtatgg atgatgcctt taaaagacaa gttgatgcaa ttgttgaagc tcatcaagct  
 1380  
 gaaatagcac agctggccaa tgaaaagcag aagtgtattg attctgcaaa tttaaaggtc  
 1440  
 catcaaattg aaaaagaaat gcgtgaactt ttggaagaaa catgcaagaa caaaaaaaca  
 1500aaattaagca acttgctttt gctttaaatg aaattcagca agatatgtga 1560  
 tgggtcttgag aatgaattta attgaaatag accagcagac ctattgtaaa aatgattaaa  
 1620  
 tattgtaata gtagtaactg ctatgacttt gaaatgtctc tttctatāca tttcattatg  
 1680  
 aatatatttt taaagacttt tgaatcaagta tttattaatt gtatagggttt tttataataa  
 1740  
 attgttgaca attttgtcta ttagaaaaaa ctaaaaaaaa aa  
 1782

<210> 2916

<211> 519

<212> PRT

<213> Homo sapiens

<400> 2916

Gln Glu Asp His Leu Lys His Leu Arg Thr Leu Glu Lys Thr Leu Glu  
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 Lys Met Glu Arg Gln Lys Arg Gln Gln Gln Ala Ala Gln Ile Arg Leu  
 20 25 30  
 Ile Gln Glu Val Glu Leu Lys Ala Ser Ala Ala Asp Arg Glu Ile Tyr  
 35 40 45  
 Leu Leu Arg Thr Ser Leu His Arg Glu Arg Glu Gln Ala Gln Gln Leu  
 50 55 60  
 His Gln Leu Leu Ala Leu Lys Glu Gln Glu His Arg Lys Glu Leu Glu  
 65 70 75 80  
 Thr Arg Glu Phe Phe Thr Asp Ala Asp Phe Gln Asp Ala Leu Ala Lys  
 85 90 95  
 Glu Ile Ala Lys Glu Glu Lys Lys His Glu Gln Met Ile Lys Glu Tyr  
 100 105 110  
 Gln Glu Lys Ile Asp Val Leu Ser Gln Gln Tyr Met Asp Leu Glu Asn  
 115 120 125  
 Glu Phe Arg Ile Ala Leu Thr Val Glu Ala Arg Arg Phe Gln Asp Val  
 130 135 140  
 Lys Asp Gly Phe Glu Asn Val Ala Thr Glu Leu Ala Lys Ser Lys His  
 145 150 155 160  
 Ala Leu Ile Trp Ala Gln Arg Lys Glu Asn Glu Ser Ser Ser Leu Ile  
 165 170 175  
 Lys Asp Leu Thr Cys Met Val Lys Glu Gln Lys Thr Lys Leu Ala Glu  
 180 185 190  
 Val Ser Lys Leu Lys Gln Glu Thr Ala Ala Asn Leu Gln Asn Gln Ile  
 195 200 205  
 Asn Thr Leu Glu Ile Leu Ile Glu Asp Asp Lys Gln Lys Ser Ile Gln  
 210 215 220  
 Ile Glu Leu Leu Lys His Glu Lys Val Gln Leu Ile Ser Glu Leu Ala  
 225 230 235 240  
 Ala Lys Glu Ser Leu Ile Phe Gly Leu Arg Thr Glu Arg Lys Val Trp  
 245 250 255  
 Gly His Glu Leu Ala Gln Gln Gly Ser Ser Leu Ala Gln Asn Arg Gly

260 265 270  
 Lys Leu Glu Ala Gln Ile Glu Ser Leu Ser Arg Glu Asn Glu Cys Leu  
 275 280 285  
 Arg Lys Thr Asn Glu Ser Asp Ser Asp Ala Leu Arg Ile Lys Cys Lys  
 290 295 300  
 Ile Ile Asp Asp Gln Thr Glu Thr Ile Arg Lys Leu Lys Asp Cys Leu  
 305 310 315 320  
 Gln Glu Lys Asp Glu His Ile Lys Arg Leu Gln Glu Lys Ile Thr Glu  
 325 330 335  
 Ile Glu Lys Cys Thr Gln Glu Gln Leu Asp Glu Lys Ser Ser Gln Leu  
 340 345 350  
 Asp Glu Val Leu Glu Lys Leu Glu Arg His Asn Glu Arg Lys Glu Lys  
 355 360 365  
 Leu Lys Gln Gln Leu Lys Gly Lys Glu Val Glu Leu Glu Glu Ile Arg  
 370 375 380  
 Lys Ala Tyr Ser Thr Leu Asn Arg Lys Trp His Asp Lys Gly Glu Leu  
 385 390 395 400  
 Leu Cys His Leu Glu Thr Gln Val Lys Glu Val Lys Glu Lys Phe Glu  
 405 410 415  
 Asn Lys Glu Lys Lys Leu Lys Ala Glu Arg Asp Lys Ser Ile Glu Leu  
 420 425 430  
 Gln Lys Asn Ala Met Glu Lys Leu His Ser Met Asp Asp Ala Phe Lys  
 435 440 445  
 Arg Gln Val Asp Ala Ile Val Glu Ala His Gln Ala Glu Ile Ala Gln  
 450 455 460  
 Leu Ala Asn Glu Lys Gln Lys Cys Ile Asp Ser Ala Asn Leu Lys Val  
 465 470 475 480  
 His Gln Ile Glu Lys Glu Met Arg Glu Leu Leu Glu Glu Thr Cys Lys  
 485 490 495  
 Asn Lys Lys Thr Met Glu Ala Lys Ile Lys Gln Leu Ala Phe Ala Leu  
 500 505 510  
 Asn Glu Ile Gln Gln Asp Met  
 515

&lt;210&gt; 2917

&lt;211&gt; 2636

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2917

ncctgcgtgt gccaccgctg gttccagccg gccatcccct cctggctgca gaagacgtac  
 60  
 aacgaggccc tggcgcggtt gcagcgggct gtgcagatgg atgagctggg gccctgggt  
 120  
 gaactgacca agcacagcac atcagcgggt gatctatcca ctngctttgc ccagatcagc  
 180  
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<211> 509

<212> PRT

<213> Homo sapiens

<400> 2918

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	260	265
Glu Ile Cys Phe His Ala Glu Gly Cys Gly Leu Pro Pro Lys Ala Leu		270
	275	280
His Thr Ala Thr Phe Gln Ala Leu Gln Arg Asp Leu Glu Leu Gln Ala		285
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Val Gln Leu Thr Leu Glu Pro Arg His Glu Phe Pro Glu Leu Ala Ala		365
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Arg Glu Thr Gln Lys His Lys Lys Asp Leu His Pro Leu Phe Asp Glu		380
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Cys Leu Leu Leu Thr Val Leu Asp Tyr Asp Thr Leu Gly Ala Asp Asp		415
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Tyr Pro Ala Pro Asn Gly Asp Pro Ile Leu Gln Leu Leu Glu Gly Arg		460
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Ala Lys Gln Ala Ser Gln His Ala Leu Arg Pro Ala Pro		495
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&lt;210&gt; 2919

&lt;211&gt; 455

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2919

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&lt;210&gt; 2922

&lt;211&gt; 452

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2922

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 35                                      40                                      45  
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<211> 305

<212> PRT

<213> Homo sapiens

<400> 2926

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His	Gly	Phe	Glu	Lys	Pro	Leu	Asp	Ser	Ala	Met	Ser	Ala	Glu	Glu
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Lys	Lys	Thr	Val	Pro	Lys	Lys	Gln	Arg	Asn	Gln	Asp	Arg	Ser	Lys
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Ala	Ala	Glu	Leu	Glu	Lys	Leu	Met	Pro	Val	Ser	Ala	Gln	Thr	Pro
							145				150			155
Gly	Arg	Arg	Leu	Ser	Gly	Glu	Glu	Arg	Gly	Leu	Trp	Ser	Thr	Asp
							160				165			170
Ala	Glu	Glu	Asp	Lys	Glu	Thr	Lys	Arg	Asn	Glu	Ser	Lys	Glu	Lys
							175				180			185
Gln	Lys	Arg	His	Asp	Ser	Asp	Lys	Glu	Glu	Lys	Gly	Arg	Lys	Glu
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Lys	Gly	Leu	Lys	Thr	Leu	Lys	Glu	Ile	Arg	Asn	Ala	Phe	Asp	Leu
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Lys	Leu	Thr	Pro	Glu	Glu	Lys	Asn	Asp	Val	Ser	Glu	Asn	Asn	Arg
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<212> DNA
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 Glu Ala Ile Met Ala Gln Gln Asp Arg Ile Gln Gln Glu Ile Ala Val  
 50 55 60  
 Gln Asn Pro Leu Val Ser Glu Arg Leu Glu Leu Ser Val Leu Tyr Lys  
 65 70 75 80  
 Glu Tyr Ala Glu Asp Asp Asn Ile Tyr Gln Gln Lys Ile Lys Asp Leu  
 85 90 95  
 His Lys Lys Tyr Ser Tyr Ile Arg Lys Thr Arg Pro Asp Gly Asn Cys  
 100 105 110  
 Phe Tyr Arg Ala Phe Gly Phe Ser His Leu Glu Ala Leu Leu Asp Asp  
 115 120 125  
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 180 185 190  
 Val Val Tyr Leu Arg Leu Leu Thr Ser Gly Tyr Leu Gln Arg Glu Ser  
 195 200 205  
 Lys Phe Phe Glu His Phe Ile Glu Gly Gly Arg Thr Val Lys Glu Phe  
 210 215 220  
 Cys Gln Gln Glu Val Glu Pro Met Cys Lys Glu Ser Asp His Ile His  
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 <211> 1166  
 <212> PRT  
 <213> Homo sapiens

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 65 70 75 80  
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 Ser Tyr Thr Ile Asp Leu Leu Ser Ala Glu Gln Asn His Ile Lys Phe  
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 325 330 335  
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 355 360 365  
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Phe Glu Cys Pro Gly Thr	Pro Glu Ala Ala Ile	Thr Ser Leu Thr Ser
435	440	445
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Leu Ser Glu Val Pro Lys	Val Glu Ala Glu Asn	Ile Ser Pro Lys Ser
465	470	475
Gln Asp Ile Pro Phe Val	Ser Thr Asp Ile Ile	Asn Thr Leu Lys Asn
485	490	495
Asp Pro Asp Ser Ala Leu	Gly Asn Gly Ser Gly	Glu Phe Ser Gln Asn
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Ser Met Glu Glu Lys Gln	Glu Thr Lys Ser Thr	Asp Gly Gln Glu Pro
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His Ser Val Val Tyr Asp	Thr Ser Asn Gly Lys	Lys Val Val Asp Ser
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Ile Arg Asn Leu Lys Ser	Leu Gly Pro Asn Gln	Glu Asn Val Gln Asn
545	550	555
Glu Ile Ile Val Tyr Pro	Glu Asn Thr Glu Asp	Asn Met Lys Asn Gly
565	570	575
Val Lys Lys Thr Glu Ile	Asn Val Glu Gly Val	Ala Lys Asn Asn Asn
580	585	590
Ile Asp Met Glu Val Glu	Arg Pro Ser Asn Ser	Glu Ala His Glu Thr
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Asp Thr Ala Ile Ser Tyr	Lys Glu Asn His Leu	Ala Ala Ser Ser Val
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Pro Asp Gln Lys Leu Asn	Gln Pro Ser Ala Glu	Lys Thr Lys Asp Ala
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Ala Ile Gln Thr Thr Pro	Ser Cys Asn Ser Phe	Asp Gly Lys His Gln
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Asp His Asn Leu Ser Asp	Ser Lys Val Glu Glu	Cys Val Gln Thr Ser
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675	680	685
Val Asn Thr Ser Arg Glu	Phe Arg Ser Gln Gly	Thr Leu Ile Ile His
690	695	700
Ser Glu Asp Pro Leu Thr	Val Lys Asp Pro Ile	Cys Ala His Gly Asn
705	710	715
Asp Asp Leu Leu Pro Pro	Val Asp Arg Ile Asp	Lys Asn Ser Thr Ala
725	730	735
Ser Tyr Leu Lys Asn Tyr	Pro Leu Tyr Arg Gln	Asp Tyr Asn Pro Lys
740	745	750
Pro Lys Pro Ser Asn Glu	Ile Thr Arg Glu Tyr	Ile Pro Lys Ile Gly
755	760	765
Met Thr Thr Tyr Lys Ile	Val Pro Pro Lys Ser	Leu Glu Ile Ser Lys
770	775	780
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785	790	795
Ala Leu Gly Lys Lys His	Thr His Glu Asn Val	Lys Glu Thr Ala Ile



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      850      855      860
Pro Lys Met Thr Arg Asp Thr Gly Thr Ala Pro Phe Ala Pro Asn Leu
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Glu Glu Ile Asn Asn Ile Leu Glu Ser Lys Phe Lys Ser Arg Ala Ser
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&lt;210&gt; 2931

&lt;211&gt; 625

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2931

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 <212> DNA  
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 420  
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 540  
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<210> 2934

<211> 229

<212> PRT

<213> Homo sapiens

<400> 2934

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Lys	Gln	Arg	Gln	Asp	Glu	Glu	Arg	Met	Val	Gln	Ser	Ser	Pro	Pro	Ile	20	25	30	
Ser	Gly	Glu	Asp	Asn	Lys	Trp	Glu	Arg	Glu	Ser	Gln	Glu	Thr	Thr	Arg	35	40	45	
Glu	Leu	Leu	Lys	Val	Lys	Asp	Arg	Leu	Ile	Glu	Val	Glu	Arg	Asn	Asn	50	55	60	
Ala	Thr	Leu	Gln	Ala	Glu	Lys	Gln	Ala	Leu	Lys	Thr	Gln	Leu	Lys	Gln	65	70	75	80
Leu	Glu	Thr	Gln	Asn	Asn	Asn	Leu	Gln	Ala	Gln	Ile	Leu	Ala	Leu	Gln	85	90	95	
Arg	Gln	Thr	Val	Ser	Leu	Gln	Glu	Gln	Asn	Thr	Thr	Leu	Gln	Thr	Gln	100	105	110	
Asn	Ala	Lys	Leu	Gln	Val	Glu	Asn	Ser	Thr	Leu	Asn	Ser	Gln	Ser	Thr	115	120	125	
Ser	Leu	Met	Asn	Gln	Asn	Ala	Gln	Leu	Leu	Ile	Gln	Gln	Ser	Ser	Leu	130	135	140	
Glu	Asn	Glu	Asn	Glu	Ser	Val	Ile	Lys	Glu	Arg	Glu	Asp	Leu	Lys	Ser	145	150	155	160
Leu	Tyr	Asp	Ser	Leu	Ile	Lys	Asp	His	Glu	Lys	Leu	Glu	Leu	Leu	His	165	170	175	
Glu	Arg	Gln	Ala	Ser	Glu	Tyr	Glu	Ser	Leu	Ile	Ser	Lys	His	Gly	Thr	180	185	190	
Leu	Lys	Ser	Ala	His	Lys	Asn	Leu	Glu	Val	Glu	His	Arg	Asp	Leu	Glu	195	200	205	
Asp	Arg	Tyr	Asn	Gln	Leu	Leu	Lys	Gln	Lys	Gly	Gln	Leu	Glu	Asp	Leu	210	215	220	
Glu	Lys	Met	Leu	Lys												225			

<210> 2935  
<211> 1200  
<212> DNA  
<213> Homo sapiens

<400> 2935  
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120  
aactctaaaa gataaagcaa gaaatgtcaa gtaggttttg cacattgggc tgcttttaggc  
180  
tgtgccctct gattcttctg gtgtactcat gatactctcc cttggtgccc tccaggctga  
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cgcagctatt tacgttcaga gtgaaatggg ctgtgtggct gggattggga aaggccttgt  
300  
taaagctggg agaggtttgg tcatggtgac aggggacctg aaggcccagc tcctcttccc  
360  
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420  
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480  
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720  
aaggctgtaa atgatgaaac atgcaaagct agccacataa catcaagtgt ctttccttca  
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1080  
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1200

<210> 2936  
<211> 109  
<212> PRT  
<213> Homo sapiens

<400> 2936  
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Val Lys Val Lys Met Glu Lys Lys Ser Thr Pro Ser Arg Gly Ser Ser
      35           40           45
Ser Lys Ser Ser Ser Arg Gln Leu Ser Glu Ser Phe Lys Ser Lys Glu
      50           55           60
Phe Val Ser Ser Asp Glu Ser Ser Ser Gly Glu Asn Lys Ser Lys Lys
      65           70           75           80
Lys Arg Arg Arg Ser Glu Asp Ser Glu Glu Glu Glu Leu Ala Ser Thr
      85           90           95
Pro Pro Ser Ser Glu Asp Ser Ala Ser Gly Ser Asp Glu
      100          105

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&lt;210&gt; 2937

&lt;211&gt; 749

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2937

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120
ctctcaaatt ttgtcttctg tcaatacaca ttctgggacc agtgtgagtc tacgggtggct
180
gccccggtgg tggaccccgga ggtgccttca ccacagtcca aggatgccca gtacacagtg
240
accttctccc actgtaagga ctatgtggtg aatgtaacag aagaatttct ggagttcatt
300
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360
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420
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480
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540
cagggtcatt cccgtagagt acaagtcacg gtgaaacctg tgcagcattc agggacactg
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660
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720
agttatcagg aagaagactt aaactgcag
749

```

&lt;210&gt; 2938

&lt;211&gt; 249

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2938

```

Xaa Asn Ser Ser Glu Ser Gly Ser Leu Glu Val Val Asp Ser Ser Gly

```

```

      1           5           10           15
Glu Ile Ile His Arg Val Lys Lys Leu Thr Cys Arg Val Lys Ile Lys
      20           25           30
Glu Ala Thr Gly Leu Pro Leu Asn Leu Ser Asn Phe Val Phe Cys Gln
      35           40           45
Tyr Thr Phe Trp Asp Gln Cys Glu Ser Thr Val Ala Ala Pro Val Val
      50           55           60
Asp Pro Glu Val Pro Ser Pro Gln Ser Lys Asp Ala Gln Tyr Thr Val
      65           70           75           80
Thr Phe Ser His Cys Lys Asp Tyr Val Val Asn Val Thr Glu Glu Phe
      85           90           95
Leu Glu Phe Ile Ser Asp Gly Ala Leu Ala Ile Glu Val Trp Gly His
      100          105          110
Arg Cys Ala Gly Asn Gly Ser Ser Ile Trp Glu Val Asp Ser Leu His
      115          120          125
Ala Lys Thr Arg Thr Leu His Asp Arg Trp Asn Glu Val Thr Arg Arg
      130          135          140
Ile Glu Met Trp Ile Ser Ile Leu Glu Leu Asn Glu Leu Gly Glu Tyr
      145          150          155          160
Ala Ala Val Glu Leu His Gln Ala Lys Asp Val Asn Thr Gly Gly Ile
      165          170          175
Phe Gln Leu Arg Gln Gly His Ser Arg Arg Val Gln Val Thr Val Lys
      180          185          190
Pro Val Gln His Ser Gly Thr Leu Pro Leu Met Val Glu Ala Ile Leu
      195          200          205
Ser Val Ser Ile Gly Cys Val Thr Ala Arg Ser Thr Lys Leu Gln Arg
      210          215          220
Gly Leu Asp Ser Tyr Gln Arg Asp Asp Glu Asp Gly Asp Asp Met Asp
      225          230          235          240
Ser Tyr Gln Glu Glu Asp Leu Asn Cys
      245

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&lt;210&gt; 2939

&lt;211&gt; 2405

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2939

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120
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180
acagaggaga agccactgtt gccaggacag acgcctgagg cggccaagac tcactctgtg
240
gagacaccat acggctctgt cactttcact gtctatggca cccccaacc caaacgcca
300
gcgaccccta cctaccacga tgtgggactc aactataaat cttgcttcca gccactgttt
360
cagttcgagg acatgcagga aatcattcag aactttgtgc gggttcatgt ggatgccctt
420
ggaatggaag agggagcccc tgtgttcct ttgggatc agtaccatc tctggaccag
480

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720  
caggaagagc tctctgaaa ttctgagttg atacaaaagt acagaaatat cattacacat  
780  
gcacccaacc tggataacat tgaattgtac tggaaacagct acaacaaccg ccgagacctg  
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900  
caagcacctc atgaagatgc agtgggtggaa tgtaactcaa aactggaccc caccagacc  
960  
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1080  
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1260  
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1980  
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2100

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<210> 2940

<211> 357

<212> PRT

<213> Homo sapiens

<400> 2940

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		20						25					30		
Tyr	Gly	Ser	Val	Thr	Phe	Thr	Val	Tyr	Gly	Thr	Pro	Lys	Pro	Lys	Arg
		35					40					45			
Pro	Ala	Ile	Leu	Thr	Tyr	His	Asp	Val	Gly	Leu	Asn	Tyr	Lys	Ser	Cys
	50					55				60					
Phe	Gln	Pro	Leu	Phe	Gln	Phe	Glu	Asp	Met	Gln	Glu	Ile	Ile	Gln	Asn
65					70					75					80
Phe	Val	Arg	Val	His	Val	Asp	Ala	Pro	Gly	Met	Glu	Glu	Gly	Ala	Pro
			85						90					95	
Val	Phe	Pro	Leu	Gly	Tyr	Gln	Tyr	Pro	Ser	Leu	Asp	Gln	Leu	Ala	Asp
		100					105						110		
Met	Ile	Pro	Cys	Val	Leu	Gln	Tyr	Leu	Asn	Phe	Ser	Thr	Ile	Ile	Gly
	115					120						125			
Val	Gly	Val	Gly	Ala	Gly	Ala	Tyr	Ile	Leu	Ala	Arg	Tyr	Ala	Leu	Asn
	130				135						140				
His	Pro	Asp	Thr	Val	Glu	Gly	Leu	Val	Leu	Ile	Asn	Ile	Asp	Pro	Asn
145					150					155					160
Ala	Lys	Gly	Trp	Met	Asp	Trp	Ala	Ala	His	Lys	Leu	Thr	Gly	Leu	Thr
			165						170					175	
Ser	Ser	Ile	Pro	Glu	Met	Ile	Leu	Gly	His	Leu	Phe	Ser	Gln	Glu	Glu
		180					185						190		
Leu	Ser	Gly	Asn	Ser	Glu	Leu	Ile	Gln	Lys	Tyr	Arg	Asn	Ile	Ile	Thr
		195				200						205			
His	Ala	Pro	Asn	Leu	Asp	Asn	Ile	Glu	Leu	Tyr	Trp	Asn	Ser	Tyr	Asn
	210					215						220			
Asn	Arg	Arg	Asp	Leu	Asn	Phe	Glu	Arg	Gly	Gly	Asp	Ile	Thr	Leu	Arg
225				230					235						240
Cys	Pro	Val	Met	Leu	Val	Val	Gly	Asp	Gln	Ala	Pro	His	Glu	Asp	Ala
			245						250					255	
Val	Val	Glu	Cys	Asn	Ser	Lys	Leu	Asp	Pro	Thr	Gln	Thr	Ser	Phe	Leu
		260					265						270		
Lys	Met	Ala	Asp	Ser	Gly	Gly	Gln	Pro	Gln	Leu	Thr	Gln	Pro	Gly	Lys



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      275              280              285
Leu Thr Glu Ala Phe Lys Tyr Phe Leu Gln Gly Met Gly Tyr Met Ala
      290              295              300
Ser Ser Cys Met Thr Arg Leu Ser Arg Ser Arg Thr Ala Ser Leu Thr
305              310              315              320
Ser Ala Ala Ser Val Asp Gly Asn Arg Ser Arg Ser Arg Thr Leu Ser
      325              330              335
Gln Ser Ser Glu Ser Gly Thr Leu Ser Ser Gly Pro Pro Gly His Thr
      340              345              350
Met Glu Val Ser Cys
      355

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&lt;210&gt; 2941

&lt;211&gt; 847

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2941

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&lt;210&gt; 2942

&lt;211&gt; 229

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2942

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 Gly Gly Asn Ala Pro Cys Ile Leu Gln Leu Asp Leu Gln His Leu His  
 20 25 30  
 Gly Arg Gly His Asp His Leu Ala Gly Ala Ser Pro Thr Ala Arg Gln  
 35 40 45  
 His Leu Phe Lys Gln Gly Gln Leu Ser Ala Gln Gly Ala Gln Pro  
 50 55 60  
 Ser Val Glu Ala Pro Ala Ala Pro Arg Pro Thr Ala Thr Gln Leu Thr  
 65 70 75 80  
 Arg Asp Leu Leu Arg Ser Arg Gly Ile Ala Gly Leu Tyr Lys Gly Leu  
 85 90 95  
 Gly Ala Thr Leu Leu Arg Asp Val Pro Phe Ser Val Val Tyr Phe Pro  
 100 105 110  
 Leu Phe Ala Asn Leu Asn Gln Leu Gly Arg Pro Ala Ser Glu Glu Lys  
 115 120 125  
 Ser Pro Phe Tyr Val Ser Phe Leu Ala Gly Cys Val Ala Gly Ser Ala  
 130 135 140  
 Ala Ala Val Ala Val Asn Pro Cys Asp Val Val Lys Thr Arg Leu Gln  
 145 150 155 160  
 Ser Leu Gln Arg Gly Val Asn Glu Asp Thr Tyr Ser Gly Ile Leu Asp  
 165 170 175  
 Cys Ala Arg Lys Ile Leu Arg His Glu Gly Pro Ser Ala Phe Leu Lys  
 180 185 190  
 Gly Ala Tyr Cys Arg Ala Leu Val Ile Ala Pro Leu Phe Gly Ile Ala  
 195 200 205  
 Gln Val Val Tyr Phe Leu Gly Ile Ala Glu Ser Leu Leu Gly Leu Leu  
 210 215 220  
 Gln Asp Pro Gln Ala  
 225

&lt;210&gt; 2943

&lt;211&gt; 1501

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2943

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 180  
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 240  
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 300  
 aagaagatga gagaggggtc tgcaaagaat atgggtcaagc agaaagcctt gcgagtttta  
 360  
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 420  
 aacgccaatt ataccatcca gtctttgaag gacaccaaga ccacgggtga tgctatgaaa  
 480

ctgggagtaa aggaaatgaa gaaggcatac aagcaagtga agatcgacca gattgaggat  
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 1200  
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 1320  
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<210> 2944

<211> 218

<212> PRT

<213> Homo sapiens

<400> 2944

Met	Asn	Arg	Leu	Phe	Gly	Lys	Ala	Lys	Pro	Lys	Ala	Pro	Pro	Pro	Ser
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Leu	Thr	Asp	Cys	Ile	Gly	Thr	Val	Asp	Ser	Arg	Ala	Glu	Ser	Ile	Asp
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Lys	Lys	Ile	Ser	Arg	Leu	Asp	Ala	Glu	Leu	Val	Lys	Tyr	Lys	Asp	Gln
		35				40					45				
Ile	Lys	Lys	Met	Arg	Glu	Gly	Pro	Ala	Lys	Asn	Met	Val	Lys	Gln	Lys
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Ala	Leu	Arg	Val	Leu	Lys	Gln	Lys	Arg	Met	Tyr	Glu	Gln	Gln	Arg	Asp
65				70					75					80	
Asn	Leu	Ala	Asn	Ser	His	Ser	Thr	Trp	Asn	Ala	Asn	Tyr	Thr	Ile	Gln

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Ser	Leu	Lys	Asp	Thr	Lys	Thr	Thr	Val	Asp	Ala	Met	Lys	Leu	Gly	Val
	100							105					110		
Lys	Glu	Met	Lys	Lys	Ala	Tyr	Lys	Gln	Val	Lys	Ile	Asp	Gln	Ile	Glu
	115						120					125			
Asp	Leu	Gln	Asp	Gln	Leu	Glu	Asp	Met	Met	Glu	Asp	Ala	Asn	Glu	Ile
	130					135					140				
Gln	Glu	Ala	Leu	Ser	Arg	Ser	Tyr	Gly	Thr	Pro	Glu	Leu	Asp	Glu	Asp
145			150					155					160		
Asp	Leu	Glu	Ala	Glu	Leu	Asp	Ala	Leu	Gly	Asp	Glu	Leu	Leu	Ala	Asp
	165						170					175			
Glu	Asp	Ser	Ser	Tyr	Leu	Asp	Glu	Ala	Ala	Ser	Ala	Pro	Ala	Ile	Pro
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Glu	Gly	Val	Pro	Thr	Asp	Thr	Lys	Asn	Lys	Asp	Gly	Val	Leu	Val	Asp
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&lt;210&gt; 2945

&lt;211&gt; 3331

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2945

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&lt;210&gt; 2946

&lt;211&gt; 463

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2946

Xaa Arg Arg Leu Ala Pro Ser Ser Ala Ser Glu Glu Asn Gly Arg Ser  
 1 5 10 15  
 Pro Ala Val Gly Pro Thr Val Ser Asn Met Ser Gly Leu Asp Gly Val  
 20 25 30  
 Lys Arg Thr Thr Pro Leu Gln Thr His Ser Ile Ile Ser Asp Gln  
 35 40 45  
 Val Pro Ser Asp Gln Asp Ala His Gln Tyr Leu Arg Leu Arg Asp Gln  
 50 55 60  
 Ser Glu Ala Thr Gln Val Met Ala Glu Pro Gly Glu Gly Gly Ser Glu  
 65 70 75 80  
 Thr Val Ala Leu Pro Pro Pro Pro Ser Glu Glu Gly Gly Val Pro  
 85 90 95  
 Gln Asp Ala Ala Gly Arg Gly Gly Thr Pro Gln Ile Arg Val Val Gly  
 100 105 110  
 Gly Arg Gly His Val Ala Ile Lys Ala Gly Gln Glu Glu Gly Gln Pro  
 115 120 125  
 Pro Ala Glu Gly Leu Ala Ala Ala Ser Val Val Met Ala Ala Asp Arg  
 130 135 140  
 Ser Leu Lys Lys Gly Val Gln Gly Gly Glu Lys Ala Leu Glu Ile Cys

145                      150                      155                      160  
 Gly Ala Gln Arg Ser Ala Ser Glu Leu Thr Ala Gly Ala Glu Ala Glu  
                                  165                      170                      175  
 Ala Glu Glu Val Lys Thr Gly Lys Cys Ala Thr Val Ser Ala Ala Val  
                                  180                      185                      190  
 Ala Glu Arg Glu Ser Ala Glu Val Val Val Lys Glu Gly Leu Ala Glu  
                                  195                      200                      205  
 Lys Glu Val Met Glu Glu Gln Met Glu Val Glu Glu Gln Pro Pro Glu  
                                  210                      215                      220  
 Gly Glu Glu Ile Glu Val Ala Glu Glu Asp Arg Leu Glu Glu Glu Ala  
 225                                   230                                   235                                   240  
 Arg Glu Glu Glu Gly Pro Trp Pro Leu His Glu Ala Leu Arg Met Asp  
                                  245                                   250                                   255  
 Pro Leu Glu Ala Ile Gln Leu Glu Leu Asp Thr Val Asn Ala Gln Ala  
                                  260                                   265                                   270  
 Asp Arg Ala Phe Gln Gln Leu Glu His Lys Phe Gly Arg Met Arg Arg  
                                  275                                   280                                   285  
 His Tyr Leu Glu Arg Arg Asn Tyr Ile Ile Gln Asn Ile Pro Gly Phe  
 290                                   295                                   300  
 Trp Met Thr Ala Phe Arg Asn His Pro Gln Leu Ser Ala Met Ile Arg  
 305                                   310                                   315                                   320  
 Gly Gln Asp Ala Glu Met Leu Arg Tyr Ile Thr Asn Leu Glu Val Lys  
                                  325                                   330                                   335  
 Glu Leu Arg His Pro Arg Thr Gly Cys Lys Phe Lys Phe Phe Phe Arg  
                                  340                                   345                                   350  
 Arg Asn Pro Tyr Phe Arg Asn Lys Leu Ile Val Lys Glu Tyr Glu Val  
                                  355                                   360                                   365  
 Arg Ser Ser Gly Arg Val Val Ser Leu Ser Thr Pro Ile Ile Trp Arg  
 370                                   375                                   380  
 Arg Gly His Glu Pro Gln Ser Phe Ile Arg Arg Asn Gln Asp Leu Ile  
 385                                   390                                   395                                   400  
 Cys Ser Phe Phe Thr Trp Phe Ser Asp His Ser Leu Pro Glu Ser Asp  
                                  405                                   410                                   415  
 Lys Ile Ala Glu Ile Ile Lys Glu Asp Leu Trp Pro Asn Pro Leu Gln  
                                  420                                   425                                   430  
 Tyr Tyr Leu Leu Arg Glu Gly Val Arg Arg Ala Arg Arg Arg Pro Leu  
                                  435                                   440                                   445  
 Arg Glu Pro Val Glu Ile Pro Arg Pro Phe Gly Phe Gln Ser Gly  
                                  450                                   455                                   460

&lt;210&gt; 2947

&lt;211&gt; 997

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2947

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120

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180

cctgggtgtac tgggcattgt gcctctgcaa ggccaaggag aggacaagcg acgcgtggcc

240

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 997

&lt;210&gt; 2948

&lt;211&gt; 332

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2948

Xaa Ala Ser Ala Ala Val Pro Val Ala Met Asn Arg Phe Arg Val Ser  
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 Lys Phe Arg His Thr Glu Ala Arg Pro Pro Arg Arg Glu Ser Trp Ile  
 20 25 30  
 Ser Asp Ile Arg Ala Gly Thr Ala Pro Ser Cys Arg Asn His Ile Lys  
 35 40 45  
 Ser Ser Cys Ser Leu Ile Ala Phe Asn Ser Asp Arg Pro Gly Val Leu  
 50 55 60  
 Gly Ile Val Pro Leu Gln Gly Gln Gly Glu Asp Lys Arg Arg Val Ala  
 65 70 75 80  
 His Leu Gly Cys His Ser Asp Leu Val Thr Asp Leu Asp Phe Ser Pro  
 85 90 95  
 Phe Asp Asp Phe Leu Leu Ala Thr Gly Ser Ala Asp Arg Thr Val Lys  
 100 105 110  
 Leu Trp Arg Leu Pro Gly Pro Gly Gln Ala Leu Pro Ser Ala Pro Gly  
 115 120 125  
 Val Val Leu Gly Pro Glu Asp Leu Pro Val Glu Val Leu Gln Phe His  
 130 135 140  
 Pro Thr Ser Asp Gly Ile Leu Val Ser Ala Ala Gly Thr Thr Val Lys  
 145 150 155 160  
 Val Trp Asp Ala Ala Lys Gln Gln Pro Leu Thr Glu Leu Ala Ala His



	165		170		175
Gly Asp Leu Val Gln Ser Ala Val Trp Ser Arg Asp Gly Ala Leu Val					
	180		185		190
Gly Thr Ala Cys Lys Asp Lys Gln Leu Gln Ile Phe Asp Pro Arg Thr					
	195		200		205
Lys Pro Arg Ala Ser Gln Ser Thr Gln Ala His Glu Asn Ser Arg Asp					
	210		215		220
Ser Arg Leu Ala Trp Met Gly Thr Trp Glu His Leu Val Ser Thr Gly					
	225		230		235
Phe Asn Gln Met Arg Glu Arg Glu Val Lys Leu Trp Asp Thr Arg Phe					
	245		250		255
Phe Ser Ser Ala Leu Ala Ser Leu Thr Leu Asp Thr Ser Leu Gly Cys					
	260		265		270
Leu Val Pro Leu Leu Asp Pro Asp Ser Gly Leu Leu Val Leu Ala Gly					
	275		280		285
Lys Gly Glu Arg Gln Leu Tyr Cys Tyr Glu Val Val Pro Gln Gln Pro					
	290		295		300
Ala Leu Ser Pro Val Thr Gln Cys Val Leu Glu Ser Val Leu Arg Gly					
	305		310		315
Ala Ala Leu Val Pro Arg Gln Ala Leu Ala Val Met					320
	325		330		

&lt;210&gt; 2949

&lt;211&gt; 880

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2949

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720  
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840

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880

<210> 2950

<211> 279

<212> PRT

<213> Homo sapiens

<400> 2950

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 20           25           30
Lys Gly Lys Arg Pro Asn Leu Lys Val His Ile Asn Thr Thr Ser Asp
 35           40           45
Ser Ile Leu Leu Lys Phe Leu Arg Pro Ser Pro Asn Val Lys Leu Glu
 50           55           60
Gly Leu Leu Leu Gly Tyr Gly Ser Asn Val Ser Pro Asn Gln Tyr Phe
 65           70           75           80
Pro Leu Pro Ala Glu Gly Lys Phe Thr Glu Ala Ile Val Asp Ala Glu
 85           90           95
Pro Lys Tyr Leu Ile Val Val Arg Pro Ala Pro Pro Pro Ser Gln Lys
100           105           110
Lys Ser Cys Ser Gly Lys Thr Arg Ser Arg Lys Pro Leu Gln Leu Val
115           120           125
Val Gly Thr Leu Thr Pro Ser Ser Val Phe Leu Ser Trp Gly Phe Leu
130           135           140
Ile Asn Pro His His Asp Trp Thr Leu Pro Ser His Cys Pro Asn Asp
145           150           155           160
Arg Phe Tyr Thr Ile Arg Tyr Arg Glu Lys Asp Lys Glu Lys Lys Trp
165           170           175
Ile Phe Gln Ile Cys Pro Ala Pro Glu Thr Ile Val Glu Asn Leu Lys
180           185           190
Pro Asn Thr Val Tyr Glu Phe Gly Val Lys Asp Asn Val Glu Gly Gly
195           200           205
Ile Trp Ser Lys Ile Phe Asn His Lys Thr Val Val Gly Ser Lys Lys
210           215           220
Val Asn Gly Lys Ile Gln Ser Thr Tyr Asp Gln Asp His Thr Val Pro
225           230           235           240
Ala Tyr Val Pro Arg Lys Leu Ile Pro Ile Thr Ile Ile Lys Gln Val
245           250           255
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260           265           270
Pro Leu Gly Gly Val Ile Leu
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<210> 2951

<211> 3478

<212> DNA

<213> Homo sapiens

<400> 2951

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2280  
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<210> 2952

<211> 493

<212> PRT

<213> Homo sapiens

<400> 2952

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Thr Thr Leu Asp Arg Asp His Asp Val Tyr Thr Gly Asn Cys Ala His
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Asn Gly Val Trp Tyr Arg Gly Gly His Tyr Arg Ser Arg Tyr Gln Asp
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&lt;210&gt; 2953

&lt;211&gt; 1377

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2953

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<211> 181

<212> PRT

<213> Homo sapiens

<400> 2954

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 <212> PRT  
 <213> Homo sapiens

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	100			105		110
Ser Asn Lys Ser Ser Phe Asp Lys Met Ile Glu Ala Ile Lys Glu Ser						
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Lys Asn Gly Lys Lys Ile Gly Val Phe Ser Lys Asp Lys Phe Pro Gly						
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Glu Phe Met Lys Ser Trp Asn Asp Cys Leu Asn Lys Glu Gly Phe Asp						
	145			150		155
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Ile Glu Glu Lys Lys Tyr Leu Ala Gly Ala Asp Pro Ser Thr Val Glu						
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Cys Ala Met Gly Ile Arg Phe Lys Ser Tyr Cys Ser Asn Leu Val Arg						
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Thr Leu Met Val Asp Pro Ser Gln Glu Val Gln Glu Asn Tyr Asn Phe						
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675										680										685											
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705										710										715											
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725										730										735											
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785										790										795											
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885										890										895											
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930                      935                      940  
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 945                      950                      955                      960  
 Asp Ser Asp Glu Asp Tyr Ser Ser Glu Ala Glu Glu Ser Asp Tyr Ser  
 965                      970                      975  
 Lys Glu Ser Leu Gly Ser Glu Glu Glu Ser Gly Lys Asp Trp Asp Glu  
 980                      985                      990  
 Leu Glu Glu Glu Ala Arg Lys Ala Asp Arg Glu Ser Arg Tyr Glu Glu  
 995                      1000                      1005  
 Glu Glu Glu Gln Ser Arg Ser Met Ser Arg Lys Arg Lys Ala Ser Val  
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<211> 3323

<212> DNA

<213> Homo sapiens

<400> 2959

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2580

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 2760  
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<210> 2960

<211> 868

<212> PRT

<213> Homo sapiens

<400> 2960

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 Gly Glu Glu Gln Ala Gln Tyr Cys Arg Ala Ala Glu Glu Leu Ser Lys  
 35 40 45  
 Leu Arg Arg Ala Ala Val Gly Arg Pro Leu Asp Lys His Glu Gly Ala  
 50 55 60  
 Leu Glu Thr Leu Leu Arg Tyr Tyr Asp Gln Ile Cys Ser Ile Glu Pro  
 65 70 75 80  
 Lys Phe Pro Phe Ser Glu Asn Gln Ile Cys Leu Thr Phe Thr Trp Lys  
 85 90 95  
 Asp Ala Phe Asp Lys Gly Ser Leu Phe Gly Gly Ser Val Lys Leu Ala  
 100 105 110  
 Leu Ala Ser Leu Gly Tyr Glu Lys Ser Cys Val Leu Phe Asn Cys Ala  
 115 120 125  
 Ala Leu Ala Ser Gln Ile Ala Ala Glu Gln Asn Leu Asp Asn Asp Glu  
 130 135 140  
 Gly Leu Lys Ile Ala Ala Lys His Tyr Gln Phe Ala Ser Gly Ala Phe  
 145 150 155 160  
 Leu His Ile Lys Glu Thr Val Leu Ser Ala Leu Ser Arg Glu Pro Thr



[illegible]

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 Gly Gly Leu Thr Thr Lys Val Gln Glu Ser Leu Lys Lys Gln Glu Gly  
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 Leu Leu Lys Asn Ile Gln Val Ser His Gln Glu Phe Ser Lys Met Lys  
 625                      630                      635                      640  
 Gln Ser Asn Asn Glu Ala Asn Leu Arg Glu Glu Val Leu Lys Asn Leu  
 645                      650                      655  
 Ala Thr Ala Tyr Asp Asn Phe Val Glu Leu Val Ala Asn Leu Lys Glu  
 660                      665                      670  
 Gly Thr Lys Phe Tyr Asn Glu Leu Thr Glu Ile Leu Val Arg Phe Gln  
 675                      680                      685  
 Asn Lys Cys Ser Asp Ile Val Phe Ala Arg Lys Thr Glu Arg Asp Glu  
 690                      695                      700  
 Leu Leu Lys Asp Leu Gln Gln Ser Ile Ala Arg Glu Pro Ser Ala Pro  
 705                      710                      715                      720  
 Ser Ile Pro Thr Pro Ala Tyr Gln Ser Leu Pro Ala Gly Gly His Ala  
 725                      730                      735  
 Pro Thr Pro Pro Thr Pro Ala Pro Arg Thr Met Pro Pro Thr Lys Pro  
 740                      745                      750  
 Gln Pro Pro Ala Arg Pro Pro Pro Pro Val Leu Pro Ala Asn Arg Ala  
 755                      760                      765  
 Pro Ser Ala Thr Ala Pro Ser Pro Val Gly Ala Gly Thr Ala Ala Pro  
 770                      775                      780  
 Ala Pro Ser Gln Thr Pro Gly Ser Ala Pro Pro Pro Gln Ala Gln Gly  
 785                      790                      795                      800  
 Pro Pro Tyr Pro Thr Tyr Pro Gly Tyr Pro Gly Tyr Cys Gln Met Pro  
 805                      810                      815  
 Met Pro Met Gly Tyr Asn Pro Tyr Ala Tyr Gly Gln Tyr Asn Met Pro  
 820                      825                      830  
 Tyr Pro Pro Val Tyr His Gln Ser Pro Gly Gln Ala Pro Tyr Pro Gly  
 835                      840                      845  
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 <211> 434  
 <212> DNA  
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 Pro Asp Glu Asp Leu Ser Xaa Arg Asn Lys Glu Pro Pro Ala Pro Ala  
 35 40 45  
 Gln Gln Leu Gln Pro Gln Pro Val Ala Val Gln Gly Pro Glu Pro Ala  
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<210> 2964  
 <211> 115  
 <212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2964

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 35 40 45  
 Gly Gly Pro Gly Arg Val Trp Gly Thr Ser Leu His Val Val Gly Leu  
 50 55 60  
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 65 70 75 80  
 Pro Leu Pro Gln Ala Trp Pro Pro Asp Thr Pro Phe Pro Ala Asp Val  
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 Pro Ala Gly  
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&lt;210&gt; 2965

&lt;211&gt; 3739

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2965

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<212> PRT

<213> Homo sapiens

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Glu Val Leu Glu Trp Tyr Thr Ala Lys Asp Phe Ile Val Gly Lys Ser
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Leu Thr Ile Leu Gly Arg Thr Phe Phe Ile Tyr Asp Cys Asp Pro Phe
      85      90      95
Thr Arg Arg Tyr Tyr Lys Glu Lys Phe Gly Ile Thr Asp Leu Pro Arg
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Pro Glu Ala Glu Ser Lys Gln Thr Glu Lys Asp Pro Gly Val Gln Glu
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Cys Lys Asp Asn Ile Arg Glu Ala Phe Gln Ile Tyr Asp Lys Glu Ala
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Ser Gly Tyr Val Asp Arg Asp Met Phe Phe Lys Ile Cys Glu Ser Leu
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Ser Asn
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&lt;211&gt; 1103

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2967

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&lt;210&gt; 2968

&lt;211&gt; 126

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2968

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20          25          30
Trp Glu Asp Lys Asp Glu Phe Leu Asp Val Ile Tyr Trp Phe Arg Gln
35          40          45
Ile Ile Ala Val Val Leu Gly Val Ile Trp Gly Val Leu Pro Leu Arg
50          55          60
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65          70          75          80
Tyr Leu Tyr Phe Ser Asn Tyr Leu Gln Ile Asp Glu Glu Glu Tyr Gly
      85          90          95
Gly Thr Trp Glu Leu Thr Lys Glu Gly Phe Met Thr Ser Phe Ala Xaa
      100          105          110
Val His Gly His Leu Asp His Leu Leu His Cys His Pro Leu
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&lt;210&gt; 2969

&lt;211&gt; 667

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2969

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&lt;210&gt; 2970

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2970

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Arg Asp Ser Lys Leu Thr Arg Leu Leu Gln Asp Ser Leu Gly Gly Asn
  20          25          30
Ser Gln Thr Ile Met Ile Ala Trp Gly Ser Pro Ser Asn Arg Asp Phe
  35          40          45
Met Glu Thr Leu Asn Thr Leu Lys Tyr Ala Asn Arg Ala Arg Asn Ile
  50          55          60
Lys Asn Lys Val Val Val Asn Gln Asp Lys Thr Ala Ser Lys Ser Met

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&lt;211&gt; 632

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2972

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145          150          155          160
Ser Thr Arg Trp Tyr Arg Ala Pro Glu Val Leu Leu Arg Ser Thr Asn
165          170          175
Tyr Ser Ser Pro Ile Asp Val Trp Ala Val Gly Cys Ile Met Ala Glu
180          185          190
Val Tyr Thr Leu Arg Pro Leu Phe Pro Gly Ala Ser Glu Ile Asp Thr
195          200          205
Ile Phe Lys Ile Cys Gln Val Leu Gly Thr Pro Lys Lys Thr Asp Trp
210          215          220
Pro Glu Gly Tyr Gln Leu Ser Ser Ala Met Asn Phe Arg Trp Pro Gln
225          230          235          240
Cys Val Pro Asn Asn Leu Lys Thr Leu Ile Pro Asn Ala Ser Ser Glu
245          250          255
Ala Val Gln Leu Leu Arg Asp Met Leu Gln Trp Asp Pro Lys Lys Arg
260          265          270
Pro Thr Ala Ser Gln Ala Leu Arg Tyr Pro Tyr Phe Gln Val Gly His
275          280          285
Pro Leu Gly Ser Thr Thr Gln Asn Leu Gln Asp Ser Glu Lys Pro Gln
290          295          300
Lys Gly Ile Leu Glu Lys Ala Gly Pro Pro Pro Tyr Ile Lys Pro Val
305          310          315          320
Pro Pro Ala Gln Pro Pro Ala Lys Pro His Thr Arg Ile Ser Ser Arg
325          330          335
Gln His Gln Ala Ser Gln Pro Pro Leu His Leu Thr Tyr Pro Tyr Lys
340          345          350
Ala Glu Val Ser Arg Thr Asp His Pro Ser His Leu Gln Glu Asp Lys
355          360          365
Pro Ser Pro Leu Leu Phe Pro Ser Leu His Asn Lys His Pro Gln Ser
370          375          380
Lys Ile Thr Ala Gly Leu Glu His Lys Asn Gly Glu Ile Lys Pro Lys
385          390          395          400
Ser Arg Arg Arg Trp Gly Leu Ile Ser Arg Ser Thr Lys Asp Ser Asp

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405 410 415  
 Asp Trp Ala Asp Leu Asp Asp Leu Asp Phe Ser Pro Ser Leu Ser Arg  
 420 425 430  
 Ile Asp Leu Lys Asn Lys Lys Arg Gln Ser Asp Asp Thr Leu Cys Arg  
 435 440 445  
 Phe Glu Ser Val Leu Asp Leu Lys Pro Ser Glu Pro Val Gly Thr Gly  
 450 455 460  
 Asn Ser Ala Pro Thr Gln Thr Ser Tyr Gln Arg Arg Asp Thr Pro Thr  
 465 470 475 480  
 Leu Arg Ser Ala Ala Lys Gln His Tyr Leu Lys His Ser Arg Tyr Leu  
 485 490 495  
 Pro Gly Ile Ser Ile Arg Asn Gly Ile Leu Ser Asn Pro Gly Lys Glu  
 500 505 510  
 Phe Ile Pro Pro Asn Pro Trp Ser Ser Ser Gly Leu Ser Gly Lys Ser  
 515 520 525  
 Ser Gly Thr Met Ser Val Ile Ser Lys Val Asn Ser Val Gly Ser Ser  
 530 535 540  
 Ser Thr Ser Ser Ser Gly Leu Thr Gly Asn Tyr Val Pro Ser Phe Leu  
 545 550 555 560  
 Lys Lys Glu Ile Gly Ser Ala Met Gln Arg Val His Leu Ala Pro Ile  
 565 570 575  
 Pro Asp Pro Ser Pro Gly Tyr Ser Ser Leu Lys Ala Met Arg Pro His  
 580 585 590  
 Pro Gly Arg Pro Phe Phe His Thr Gln Pro Arg Ser Thr Pro Gly Leu  
 595 600 605  
 Ile Pro Arg Pro Pro Ala Ala Gln Pro Val His Gly Arg Thr Asp Trp  
 610 615 620  
 Ala Ser Lys Tyr Ala Ser Arg Arg  
 625 630

&lt;210&gt; 2973

&lt;211&gt; 858

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2973

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 120  
 gtcagcagcc cagaccccat caggggagag gtggttaaagg catttatagt ccttactcca  
 180  
 gcctactcct ctcatgaccc agaggcacta acgcgggaac tccaggagca tgtgaaaagg  
 240  
 gtgactgctc catacaaaac ccccaggaag gtggcctttg tttcagaact gccaaagacg  
 300  
 gtttctggaa agatccaaag gagtaaatg cgaagtcagg agtgggggaa atgaggtgca  
 360  
 ccccaggaag gccctgtaga cctccgaaga ctccacaaga aactaatgga tcaactgtgca  
 420  
 gtcccatgg ggagcatcat ctcttcgacc ctaaagatgt caaagggtg cagcttccaa  
 480  
 acggcatccc caggatcact gggcaatgct ggaaagagca aaagaatatc attggccctg  
 540

atcacataga tgctgegccg cctagcaaat gcttggtggt tgcacttctc cctctgtctg  
 600  
 ggggcaggct cagcatctgc ccactggtct cactaagagc tttcagattt ccctccatag  
 660  
 gacagggttac catagacttg gggcacttgt gggactcat tttctgccag tgggaatgta  
 720  
 aaggcttcat cctttgtatg taaccatttg gcaaaagtat gcaggaacat aaaataaaat  
 780  
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 840  
 agaaaatgtg gagtgcac  
 858

<210> 2974

<211> 117

<212> PRT

<213> Homo sapiens

<400> 2974

Gly	Tyr	Phe	Trp	Phe	Met	Gly	Arg	Thr	Asp	Asp	Val	Ile	Asn	Ser	Ser
1				5					10					15	
Ser	Tyr	Arg	Ile	Gly	Pro	Val	Glu	Val	Glu	Ser	Ala	Leu	Ala	Glu	His
			20					25					30		
Pro	Ala	Val	Leu	Glu	Ser	Ala	Val	Val	Ser	Ser	Pro	Asp	Pro	Ile	Arg
			35				40					45			
Gly	Glu	Val	Val	Lys	Ala	Phe	Ile	Val	Leu	Thr	Pro	Ala	Tyr	Ser	Ser
			50			55				60					
His	Asp	Pro	Glu	Ala	Leu	Thr	Arg	Glu	Leu	Gln	Glu	His	Val	Lys	Arg
65					70				75					80	
Val	Thr	Ala	Pro	Tyr	Lys	Thr	Pro	Arg	Lys	Val	Ala	Phe	Val	Ser	Glu
				85				90					95		
Leu	Pro	Lys	Thr	Val	Ser	Gly	Lys	Ile	Gln	Arg	Ser	Lys	Leu	Arg	Ser
			100				105						110		
Gln	Glu	Trp	Gly	Lys											
			115												

<210> 2975

<211> 1425

<212> DNA

<213> Homo sapiens

<400> 2975

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 120  
 acaccagaat ccagccaga tactccgcct ggcacccctc tgggtgtccca agatgagaag  
 180  
 agagatgctg agctgccgaa gaagcgtatg gggaagtcaa accccggctg ggagaacttg  
 240  
 gagaagttgc tagtgttcac cgcagctggg gtgaaaccgg ggnncaaggt ggctggcttt  
 300  
 gatctggacg ggaagctcat caccacacgc tctgggaagg tctttccac tggccccagt  
 360



gactggagga tcttgtagcc agagattccc cgtaagctcc gagagctgga agccgagggc  
 420  
 tacaagctgg tgatcttcac caaccagatg agcatcgggc gcgggaagct gccagccgag  
 480  
 gagttcaagg ccaaggtgga ggctgtggtg gagaagctgg gggccccctt ccagggtgctg  
 540  
 gtggccacgc acgcaggctt gtaccggaag ccggtgacgg gcatgtggga ccatctgcag  
 600  
 gagcaggcca acgacggcac gcccatatcc atcggggaca gcatctttgt gggagacgca  
 660  
 gccggacgcc cgcccaactg gggcccgggg cggaagaaga aagacttctc ctgcgccgat  
 720  
 cgctgtttg cctcaacct tggcctgccc ttgccacgc ctgaggagt ctttctcaag  
 780  
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 840  
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 900  
 gtgggattcc ctggggccgg gaagtccacc tttctcaaga agcacctcgt gtcggccgga  
 960  
 tatgtccacg tgacagggac acgctaggct cctggcagcg ctgtgtgacc acgtgtgaga  
 1020  
 cagccctgaa gcaaggga aa cggtcgcca tcgacaacac aaaccagac gccgcgagcc  
 1080  
 gcgccaggta cgtccagtgt gcccgagccg cgggcgtccc ctgccgtgc ttcctcttca  
 1140  
 ccgcccactc ggagcaggcg cgccacaaca accggtttcg agagtgacg gactcctctc  
 1200  
 atatccccgt gtcagacatg gtcattgatg gctacaggaa gcagttcgag gcccacacgc  
 1260  
 tggctgaagg cttctctgcc atcctggaga tcccgttccg gctatgggtg gagccgaggc  
 1320  
 tggggcggt gtactgccag ttctccgagg gctgagcccg cccagctccc ctccacaata  
 1380  
 aacgctgttt ctccttgaaa aaaaaaaaaa aaaaaaaaaa aaaaa  
 1425

&lt;210&gt; 2976

&lt;211&gt; 328

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2976

Pro Ser Thr Thr Gly Thr Gln Glu Leu Lys Pro Gly Leu Glu Gly Ser  
 1 5 10 15  
 Leu Gly Val Gly Asp Thr Met Tyr Thr Val Asn Gly Val His Pro Leu  
 20 25 30  
 Thr Leu Arg Trp Glu Glu Thr Arg Thr Pro Glu Ser Gln Pro Asp Thr  
 35 40 45  
 Pro Pro Gly Thr Pro Leu Val Ser Gln Asp Glu Lys Arg Asp Ala Glu  
 50 55 60  
 Leu Pro Lys Lys Arg Met Gly Lys Ser Asn Pro Gly Trp Glu Asn Leu  
 65 70 75 80  
 Glu Lys Leu Leu Val Phe Thr Ala Ala Gly Val Lys Pro Gly Xaa Lys

[illegible]

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<210> 2977
<211> 1420
<212> DNA
<213> Homo sapiens
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<400> 2977
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ggacactacc actgcactgc cgctgagtgg attcaggatc ctgatggcag ctgggcccag
120
attgcagaga aaagggcctg cctggccccc gtggatgtgc agacgctgtc cagccagctg
180
gcagtgcag tggggcctgg tgaacgtcgg atcggcccgag gggagccctt ggaactgtcg
240
tgcaatgtgt caggggcact tccccagca ggccgctatg ctgcatactc tgtaggttgg
300
gagatggcac ctgcgggggg acctggggcc ggccgcctgg tagcccagct ggacacagag
360
ggtgtgggca gcctgnnggc cctggctatg agggccgacn acattgccat ggagaaggtg
420
gcattccagaa cataccggct acggctagag gctgccaggc ctggtgatgc gggcacctac
480

```

cgctgcctcg ccaaagccta tgttcgaggg tctgggaccc ggcttcgtga agcagccagt  
 540  
 gcccgttccc ggctctctccc tgtacatgtg cgggaggaag gtgtggtgct ggaggctgtg  
 600  
 gcatggctag caggaggcac agtgtagcgc ggggagactg cctccctgct gtgcaacatc  
 660  
 tctgtgcggg gtggccccc aggactgcgg ctggccgcca gctggtgggt ggagcgacca  
 720  
 gaggacggag agctcagctc tgtccctgcc cagctggtgg gtggcgtagg ccaggatggt  
 780  
 gtggcagagc tgggagtcgg gcctggagga ggccctgtca gcgtagagct ggtggggccc  
 840  
 cgaagccatc ggctgagact acacagcttg gggcccgagg atgaaggcgt gtaccactgt  
 900  
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 960  
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 1020  
 ctggtgggta caggggtggc cctagtcact ggtgccactg tccttggtag catcacttgc  
 1080  
 tgcttcatga agaggcttcg aaaacggtga tcccttactc ccagcccac accgggcacc  
 1140  
 cttttcaggt cttgcaggtg tcgactgtct tccggcccag ctccaagccc tcctctggtt  
 1200  
 gcctggacac cctctccctc tgtccactct tcctttaatt tatttgacct ccactaccc  
 1260  
 agaatgggag acgtgcctcc ccttccccac tccttccctc ccaagcccct ccctctggcc  
 1320  
 ttctgttctt gatctcttag ggatcctata gggaggccat ttctgtcctt ggaattagtt  
 1380  
 tttctaaaat gtgaataaac ttgttttata aaaagcaaaa  
 1420

<210> 2978

<211> 369

<212> PRT

<213> Homo sapiens

<400> 2978

Xaa Ser Asn Ile His Ala Glu Tyr Arg Met Val Val Gly Gly Ala Gln  
 1 5 10 15  
 Ala Gly Asp Ala Gly Thr Tyr His Cys Thr Ala Ala Glu Trp Ile Gln  
 20 25 30  
 Asp Pro Asp Gly Ser Trp Ala Gln Ile Ala Glu Lys Arg Ala Val Leu  
 35 40 45  
 Ala His Val Asp Val Gln Thr Leu Ser Ser Gln Leu Ala Val Thr Val  
 50 55 60  
 Gly Pro Gly Glu Arg Ile Gly Pro Gly Glu Pro Leu Glu Leu Leu  
 65 70 75 80  
 Cys Asn Val Ser Gly Ala Leu Pro Pro Ala Gly Arg His Ala Ala Tyr  
 85 90 95  
 Ser Val Gly Trp Glu Met Ala Pro Ala Gly Ala Pro Gly Pro Gly Arg  
 100 105 110  
 Leu Val Ala Gln Leu Asp Thr Glu Gly Val Gly Ser Leu Xaa Ala Leu

115	120	125
Ala Met Arg Ala Asp Xaa Ile Ala Met Glu Lys Val Ala Ser Arg Thr		
130	135	140
Tyr Arg Leu Arg Leu Glu Ala Ala Arg Pro Gly Asp Ala Gly Thr Tyr		
145	150	155
Arg Cys Leu Ala Lys Ala Tyr Val Arg Gly Ser Gly Thr Arg Leu Arg		
165	170	175
Glu Ala Ala Ser Ala Arg Ser Arg Pro Leu Pro Val His Val Arg Glu		
180	185	190
Glu Gly Val Val Leu Glu Ala Val Ala Trp Leu Ala Gly Gly Thr Val		
195	200	205
Tyr Arg Gly Glu Thr Ala Ser Leu Leu Cys Asn Ile Ser Val Arg Gly		
210	215	220
Gly Pro Pro Gly Leu Arg Leu Ala Ala Ser Trp Trp Val Glu Arg Pro		
225	230	235
Glu Asp Gly Glu Leu Ser Ser Val Pro Ala Gln Leu Val Gly Gly Val		
245	250	255
Gly Gln Asp Gly Val Ala Glu Leu Gly Val Arg Pro Gly Gly Gly Pro		
260	265	270
Val Ser Val Glu Leu Val Gly Pro Arg Ser His Arg Leu Arg Leu His		
275	280	285
Ser Leu Gly Pro Glu Asp Glu Gly Val Tyr His Cys Ala Pro Ser Ala		
290	295	300
Trp Val Gln His Ala Asp Tyr Ser Trp Tyr Gln Ala Gly Ser Ala Arg		
305	310	315
Ser Gly Pro Val Thr Val Tyr Pro Tyr Met His Ala Leu Asp Thr Leu		
325	330	335
Phe Val Pro Leu Leu Val Gly Thr Gly Val Ala Leu Val Thr Gly Ala		
340	345	350
Thr Val Leu Gly Thr Ile Thr Cys Cys Phe Met Lys Arg Leu Arg Lys		
355	360	365

Arg

&lt;210&gt; 2979

&lt;211&gt; 2191

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2979

```

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tcagctaaca ttcattctcg acctagacaa aaacaattag atgattatga cttgcttttc
120
catcatcaac tcattttttt gtatgaataa ccaaaaaatt tcttcaacac ttttttttaa
180
gaagaagcta taaataaata aagccttaaa caatcctggg ttcaagttaa acagttccag
240
ttcccgaaaa gttcacagcc ttgttttgtg ggcagttctg ctgttcctgg ctcccccctc
300
caggagggga cgtttgcagg tctgggggtc ctggtgacta agctgttagc tccactccct
360
gcctgtttcc gtccctcacag cctggggagg gccccggtgg acagagtcct tacaatttag
420

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gagatgctgc tggcaaagga actgttgacc caaagcaggt ggctgaatg ggaagtgcc  
480  
ggctggacac ttgggggctg agggcactgc cagctgccgc cgcctctgga cacctcagcc  
540  
cggcgctggc ccgagaggag actgctttcc aaatgcagcg aagagactga gacaagaccc  
600  
gtgcttccgt gtgagttggg atgcggggca taagttaaca catattccaa tatgtacaaa  
660  
acaacctcgc ctcaggcccc cgcaccagc aagcccatgg tgaaggtag gtcacctga  
720  
gccaggcctc tggctgggtg tccacctcct gccgggaagc caagggtccc cactggctt  
780  
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840  
catgttgagt gtccgagcag attcccattg accctgacct ccctttgaaa gaaccacacc  
900  
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960  
gcgcggcgct ggcacgtgt ccacctgcc ctgttgacca tctgtcctt ggacccaaa  
1020  
gtaaaaatggg gccagtgtag gagacctgag ggtggggccc ttatgccaga cctccagggg  
1080  
tagcgacctc acctgacccc agcttcggct tctgtgtctg cagaaggcgc ttgtcccaa  
1140  
gcccgtgggtg acccacgtct ccaccccatg gtgtggcaac tgtgggtggct gagtgaagc  
1200  
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1320  
cctgtgtggg ccctcctaga gacaccagct tggcctccta gggcataagg aatggggaca  
1380  
gggcacaggg cactgtctta caacggatat gcaacatggc ttttggtagg gccattgcag  
1440  
ccagtgggga aacctgcgcg gctgctggga acagagcatg gccagccttt tgccaggggg  
1500  
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1620  
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1680  
tcccctgctc cagccgatgg aagcctgatg aacttaatcc gtacgtggt gggagcagt  
1740  
gtatttgagc tcttgagtat gtgtttcggg gatggggctg gggcagcctg ctagcaaatc  
1800  
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1920  
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1980  
ggcaatgcag ctcgggccta ctacccaaac ccctggcaaa aggctggcca tgctctgttc  
2040

ccagcagccg cgcagggttc ccactggct gcaatggccc taccaaaagc catgttgcac  
 2100  
 atccgttgta agcagctgcc ctgtgccctg tccccattcc ttatgcccta ggaggccaag  
 2160  
 ctggtgtctc taggagggcc cacacaggca c  
 2191

<210> 2980  
 <211> 140  
 <212> PRT  
 <213> Homo sapiens

<400> 2980  
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 20 25 30  
 Gly Thr Glu His Gly Gln Pro Phe Ala Arg Gly Trp Gly Ala Trp Gly  
 35 40 45  
 Asn Ala Arg Arg Ala Arg Val Gly Arg Ala Glu Cys Leu Leu Ser Gly  
 50 55 60  
 Arg Pro Pro Thr Ala Val Leu Pro Arg Leu Val Glu Asn Leu Lys Ala  
 65 70 75 80  
 Arg Val Pro Val Pro Gly His Thr Glu Pro Leu Trp Ser Glu Gly Thr  
 85 90 95  
 Ala Pro Gly Gln Gly Leu Trp Ser His Ala Pro Ala Asp Gly Ser Leu  
 100 105 110  
 Met Asn Leu Ile Arg Thr Leu Val Gly Ala Val Val Phe Glu Leu Leu  
 115 120 125  
 Ser Met Cys Phe Gly Asp Gly Ala Gly Ala Ala Cys  
 130 135 140

<210> 2981  
 <211> 617  
 <212> DNA  
 <213> Homo sapiens

<400> 2981  
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 120  
 ataaacacga tgaacttgaa gctccctcaa tgaaaacaga caccagaacc atctttgtcg  
 180  
 ccattctcag ctgcatctcc atccttctcc tcttctctc agtcttctc atctacagat  
 240  
 gcangccagc acagttctc atctgaggaa tccaccaaga gaaccagcca ttccaaactt  
 300  
 ccggagcagg aggctgccga ggcagattta tccaatatgg aaagggtatc tctctcgacg  
 360  
 gcagaccccc aaggagtgc ctatgctgag ctaagcacca gcgccctgtc tgaggcagct  
 420  
 tcagacacca cccaggagcc cccaggatct catgaatatg cggcactgaa agtgtagcaa  
 480

gaagacagcc ctggccacta aaagaggggg gatcgtgctg gccagggtta tcggaaatct  
 540  
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 600  
 tcttaaaaaa aaaaaaa  
 617

<210> 2982

<211> 107

<212> PRT

<213> Homo sapiens

<400> 2982

Lys Gln Thr Pro Glu Pro Ser Leu Ser Pro Ser Ser Ala Ala Ser Pro  
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 Ser Phe Ser Ser Ser Ser Gln Ser Ser Ser Ser Thr Asp Ala Xaa Gln  
 20 25 30  
 His Ser Ser Ser Ser Glu Glu Ser Thr Lys Arg Thr Ser His Ser Lys  
 35 40 45  
 Leu Pro Glu Gln Glu Ala Ala Glu Ala Asp Leu Ser Asn Met Glu Arg  
 50 55 60  
 Val Ser Leu Ser Thr Ala Asp Pro Gln Gly Val Thr Tyr Ala Glu Leu  
 65 70 75 80  
 Ser Thr Ser Ala Leu Ser Glu Ala Ala Ser Asp Thr Thr Gln Glu Pro  
 85 90 95  
 Pro Gly Ser His Glu Tyr Ala Ala Leu Lys Val  
 100 105

<210> 2983

<211> 614

<212> DNA

<213> Homo sapiens

<400> 2983

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 tacctactgc ccaaggacat caaactggcg gtgctgggcg ccggccgcgt gggcaagagc  
 120  
 gcaatgatcg tgcgcttcct gaccaagaga ttcattggag actatgaacc gaatacaggc  
 180  
 aagctgtatt cacggctggt ctatgtcgag ggggaccagc tctccctgca gatccaggat  
 240  
 actccccggg gcgtccagat ccaagacagc ctccccagg tcgtcgattc cctgcaaatg  
 300  
 cgtgcagtgg ccgaggggtt tctgctggtc tattccatca cagactatga cagctacttg  
 360  
 tccatccgac ccttttatca gcacatccgg aaggtccacc ctgactctaa agccccgtc  
 420  
 atcatcgtgg gcaacaaggg ggaccttttg catgcccggc aggtgcagac acaggacggt  
 480  
 attcagctag ccaatgagct gggcagcctg ttccttgaat tttccactag cgaaaactac  
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614

<210> 2984

<211> 204

<212> PRT

<213> Homo sapiens

<400> 2984

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Arg Pro Leu Ser Met Ser Gly His Phe Leu Leu Ala Pro Ile Pro Glu
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 20           25           30
Gly Ala Gly Arg Val Gly Lys Ser Ala Met Ile Val Arg Phe Leu Thr
 35           40           45
Lys Arg Phe Ile Gly Asp Tyr Glu Pro Asn Thr Gly Lys Leu Tyr Ser
 50           55           60
Arg Leu Val Tyr Val Glu Gly Asp Gln Leu Ser Leu Gln Ile Gln Asp
 65           70           75           80
Thr Pro Gly Gly Val Gln Ile Gln Asp Ser Leu Pro Gln Val Val Asp
 85           90           95
Ser Leu Gln Met Arg Ala Val Ala Glu Gly Phe Leu Leu Val Tyr Ser
100           105           110
Ile Thr Asp Tyr Asp Ser Tyr Leu Ser Ile Arg Pro Leu Tyr Gln His
115           120           125
Ile Arg Lys Val His Pro Asp Ser Lys Ala Pro Val Ile Ile Val Gly
130           135           140
Asn Lys Gly Asp Leu Leu His Ala Arg Gln Val Gln Thr Gln Asp Gly
145           150           155           160
Ile Gln Leu Ala Asn Glu Leu Gly Ser Leu Phe Leu Glu Ile Ser Thr
165           170           175
Ser Glu Asn Tyr Glu Asp Val Cys Asp Val Phe Gln His Leu Cys Lys
180           185           190
Glu Val Ser Lys Met His Gly Leu Ser Gly Glu Arg
195           200

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<210> 2985

<211> 4547

<212> DNA

<213> Homo sapiens

<400> 2985

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<211> 988

<212> PRT

<213> Homo sapiens

<400> 2986

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Lys	Ala	Glu	Glu	Leu	Leu	Trp	Arg	Lys	Val	Tyr	Tyr	Glu	Val	Ile	Gln
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Ala Gly Val Asp Thr Glu Leu Leu Ala Glu Arg Phe Tyr Tyr Gln Ala
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&lt;211&gt; 1016

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2987

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&lt;210&gt; 2988

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2988

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2224

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<210> 2994  
<211> 229  
<212> PRT  
<213> Homo sapiens

<400> 2994  
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35 40 45  
Ile Gly Arg Gly Ser Phe Lys Thr Val Tyr Arg Gly Leu Asp Thr Asp  
50 55 60  
Thr Thr Val Glu Val Ala Trp Cys Glu Leu Gln Thr Arg Lys Leu Ser  
65 70 75 80  
Arg Ala Glu Arg Gln Arg Phe Ser Glu Glu Val Glu Met Leu Lys Gly  
85 90 95  
Leu Gln His Pro Asn Ile Val Arg Phe Tyr Asp Ser Trp Lys Ser Val  
100 105 110  
Leu Arg Gly Gln Val Cys Ile Val Leu Val Thr Glu Leu Met Thr Ser  
115 120 125  
Gly Thr Leu Lys Thr Tyr Leu Arg Arg Phe Arg Glu Met Lys Pro Arg  
130 135 140  
Val Leu Gln Arg Trp Ser Arg Gln Ile Leu Arg Gly Leu His Phe Leu  
145 150 155 160  
His Ser Arg Val Pro Pro Ile Leu His Arg Asp Leu Lys Cys Asp Asn  
165 170 175  
Val Phe Ile Thr Gly Pro Thr Gly Ser Val Lys Ile Gly Asp Leu Gly  
180 185 190  
Leu Ala Thr Leu Lys Arg Ala Ser Phe Ala Lys Ser Val Ile Gly Thr  
195 200 205  
Pro Glu Phe Met Ala Pro Glu Met Tyr Glu Glu Lys Tyr Asp Glu Ala  
210 215 220  
Val Asp Val Tyr Ala  
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<210> 2995  
<211> 1879  
<212> DNA  
<213> Homo sapiens

<400> 2995  
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180  
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240

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420  
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1680  
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1740  
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1860

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1879

<210> 2996

<211> 101

<212> PRT

<213> Homo sapiens

<400> 2996

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 20           25           30
Leu Xaa Thr Gln Ala Gly Ile Gln Trp Cys Asp Leu Ser Ser Leu Gln
 35           40           45
Pro Pro Pro Pro Arg Phe Lys Arg Phe Ser Cys Leu Ser Leu Leu Ser
 50           55           60
Ser Trp Asp Ser Asp Arg Cys Leu Pro Pro His Pro Gly Asp Phe Cys
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Ile Phe Ser Arg Asp Gly Val Ser Pro Cys Cys Ser Gly Trp Ser Arg
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<210> 2997

<211> 800

<212> DNA

<213> Homo sapiens

<400> 2997

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acaaccatac ctgcttcctc tgagataaca agaattgaga tggagtcaac atccaccctg
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acccccacac caagggagac cagcacctcc caggagatcc actcagccac aaagccaagc
240
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tcctctagca gaggacctag ccctgatcag tccacaatgt cacaagacat atccactgaa
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660
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720

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<210> 2998  
 <211> 266  
 <212> PRT  
 <213> Homo sapiens

<400> 2998  
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 35 40 45  
 Ile Thr Arg Ile Glu Met Glu Ser Thr Ser Thr Leu Thr Pro Thr Pro  
 50 55 60  
 Arg Glu Thr Ser Thr Ser Gln Glu Ile His Ser Ala Thr Lys Pro Ser  
 65 70 75 80  
 Thr Val Pro Tyr Lys Ala Leu Thr Ser Ala Thr Ile Glu Asp Ser Met  
 85 90 95  
 Thr Gln Val Met Ser Ser Ser Arg Gly Pro Ser Pro Asp Gln Ser Thr  
 100 105 110  
 Met Ser Gln Asp Ile Ser Thr Glu Val Ile Thr Arg Leu Ser Thr Ser  
 115 120 125  
 Pro Ile Lys Thr Glu Ser Thr Glu Met Thr Ile Thr Thr Gln Thr Gly  
 130 135 140  
 Ser Pro Gly Ala Thr Ser Arg Gly Thr Leu Thr Leu Asp Thr Ser Thr  
 145 150 155 160  
 Thr Phe Met Ser Gly Thr His Ser Thr Ala Ser Gln Arg Phe Ser His  
 165 170 175  
 Ser Gln Met Thr Ala Leu Met Ser Arg Thr Pro Gly Asp Val Pro Trp  
 180 185 190  
 Leu Thr His Pro Ser Gly Glu Glu Pro Ala Ser Ala Ser Phe Ser Leu  
 195 200 205  
 Ala Ser Pro Val Leu Thr Ser Phe Phe Ser Phe Phe Ala His Ser Gln  
 210 215 220  
 Lys Pro Pro Pro Phe Leu Val Pro Gly Gln Thr Phe Ser Leu Gly Leu  
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<210> 2999  
 <211> 550  
 <212> DNA  
 <213> Homo sapiens

<400> 2999  
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 180  
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 420  
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<210> 3000

<211> 167

<212> PRT

<213> Homo sapiens

<400> 3000

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Val	Gln	Leu	Val	Val	Leu	Ile	Ser	Ala	Gln	Leu	Trp	Leu	Ser	Pro	Gly
			20					25					30		
Ala	Phe	Met	Gly	Leu	Arg	Gly	Glu	Lys	Val	His	Ala	Asn	Ser	Ser	Met
		35				40					45				
Gly	Gly	His	Gly	Trp	Ala	Gln	Gly	Lys	Ala	Pro	Gln	Val	Ala	Leu	Ala
	50					55				60					
Val	Ser	Gly	Thr	Gly	Asp	Pro	Ser	Pro	Arg	Leu	Gln	Ala	Phe	Pro	Gly
	65				70				75					80	
Leu	Glu	Val	Gly	Leu	His	Cys	Gly	Pro	Ala	Ser	Phe	His	Pro	Gly	Ala
			85					90					95		
Cys	Leu	Pro	Pro	Ala	Ala	Val	His	Gly	Asp	Gln	Ala	Val	His	Val	Lys
		100						105					110		
Gly	Cys	Leu	Gln	Ala	Ser	Thr	Gly	Leu	Ser	Ser	Val	His	Pro	Ser	Ala
	115					120					125				
Ser	Phe	Pro	Cys	Leu	Ser	Val	Pro	Lys	Ala	Trp	Arg	Gly	Pro	Lys	Trp
	130					135				140					
Gln	Gly	Gly	Trp	His	Val	Ser	Thr	Thr	Pro	Ser	Met	Cys	Thr	Leu	Ser
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Trp	Ala	Val	Thr	Ala	Pro	Gly									
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<210> 3001

<211> 1092

<212> DNA

<213> Homo sapiens

<400> 3001

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 180  
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 240  
 actgaggcat ccagcccagc tcaggccctg ccaccnnca gtaccaaagc atcattgtca  
 300  
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 1080  
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&lt;210&gt; 3002

&lt;211&gt; 115

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3002

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 Trp Leu Ser Leu Lys Gly His Cys Ser Val Ser Ala Leu Arg Cys Leu  
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 Glu Val Gln Arg Leu Ser Pro Tyr Val Cys Leu Gly Glu Ser Gln Lys  
 35 40 45  
 Val Glu Ser Gln Pro Cys Ser Ala His Gln Cys Phe Phe Tyr Asn Pro  
 50 55 60  
 Asp Ile Ala Lys Thr Ala Val Pro Thr Glu Ala Ser Ser Pro Ala Gln